

# ASX:CXO Announcement

30 June 2020

# New Ore Reserve Increase Significantly Extends Finniss Project Life

## Highlights

- Increased Ore Reserves underpin a JORC-compliant seven-year Life of Mine (LOM)
- Finniss Ore Reserves increased by 159%
- Underground Mining Pre-Feasibility Study has confirmed the viability of underground mining at BP33 and Carlton
- Maiden Underground Ore Reserve Estimates established for BP33 and Carlton
- Low start-up capital requirements for the Finniss project materially unchanged
- Current additional Mineral Resource inventory to potentially sustain the Finniss Project closer to ten years
- Extended Ore Reserves and mine life significantly improve potential Project returns, as Core targets FID in 2020

Advanced Northern Territory lithium developer, **Core Lithium Ltd** (ASX: CXO) (**Core** or **Company**), is pleased to announce a significant increase in the Ore Reserves and, as a result, Life of Mine (LOM) for the Company's wholly owned Finniss Lithium Project in the Northern Territory (Finniss Project).

Total Ore Reserves now stand at 5.7 million tonnes (Mt), which supports a 7-year LOM assuming open pit mining methods at the Grants deposit and underground mining methods at the BP33 and Carlton deposits (Table 1).



An Underground Pre-Feasibility Study (PFS) was also extended beyond Measured and Indicated Resources, with a Scoping Study (SS) conducted in parallel to assess true project potential and to help direct immediate resource conversion and resource extension drilling efforts.

The PFS and SS (together "the studies") strengthen the potential for the Finniss Project to achieve a 9-year Project and potentially beyond.

Importantly, on the back of this increase in Reserves, the LOM of the Finniss Project has doubled and can be achieved without substantial increases to the start-up capital for the Finniss Project.

The increased Resources, Reserves and extended mine plan along with other key inputs will be used to update the Feasibility Study for the Finniss Project as the Company moves toward Financial Investment Decision (FID) later in 2020.

The subvertical shape of the deposits and excellent ground conditions at BP33 and Carlton, allowed sublevel open stoping to be selected as the mining method for the PFS to provide a lower cost and lower risk method than other underground mining methods.

The underground PFS and SS was recently completed by independent consulting firm OreWin Pty Ltd (OreWin). OreWin is an Australian mining consultancy that specialises in all aspects of project development, from resource evaluation through to feasibility studies. The studies have examined underground mining of the Mineral Resources for the Grants, BP33 and Carlton deposits.

Core is at the front of the line of new global lithium production, with recent approval from the NT Government to develop one of the most capital efficient and cost competitive lithium projects in Australia.

The Finniss Project is located within 25km of power station, gas, rail and one hour by sealed road to workforce accommodated in the capital city of Darwin and importantly to Darwin Port - Australia's nearest port to Asia.

Core has also recently signed its first European Offtake MOU with Geneva-based Transamine for 50,000tpa, in addition to binding offtake for 75,000tpa with one of China's largest lithium producers, Szechuan Yahua.

Core's Managing Director, Mr Stephen Biggins stated:

"Today's announcement of a seven year mine life backed by Reserves, and closer toward 10 years when including the Project's potential resource inventory, now allows us to seriously leverage the Finniss Project's strength of location and production capacity to fully embrace such infrastructure as grid connection to power.

"The downstream lithium battery supply chain and project financiers have recognised the significance of the recent Finniss Project approvals and the now extended feasible



production capacity. We are well engaged with a number of parties globally for the remaining offtake of Core's high-quality lithium concentrate and expect to be engaging with project financiers in the second half of 2020 to reach FID.

"In the context of the substantial increases in Resource and Reserves of the Finniss Project this month, coupled with additional demand for offtake, Core is also likely to consider expanding production and revenues from the Finniss Project above the current concentrate production capacity of 175,000tpa."

#### MINING PREFEASIBILITY STUDY AND RESERVE STATEMENT

Core is developing the Finniss Project, located near Darwin in the Northern Territory in Australia.

Total Ore Reserves are now 5.7Mt and support a 7-year mine life assuming open pit mining methods at Grants and underground mining methods at BP33 & Carlton (Table 1). The Reserve-backed mine plan and schedule is illustrated in Figure 1 below.

Importantly, the LOM of the Project backed by Reserves has doubled but does not require substantial increases to the start-up capital for the Finniss Project.

Core has previously completed a Definitive Feasibility Study (DFS) in 2019 that has identified an Ore Reserve at the Grants deposit to be mined from an open pit.

The Grants, BP33 and Carlton Deposits and central processing plant at Grants are located within a 3km radius. Ore from the underground mines would be trucked to the Grants processing plant.

The subvertical shape of the deposits and excellent ground conditions at BP33 and Carlton, allowed sublevel open stoping to be selected as the mining method for the PFS to provide a lower cost and lower risk method than other underground mining methods.

In the PFS study, the underground portion of the Finniss Ore Reserve has been identified and reported. Proved and Probable Ore Reserves were estimated for the BP33 and Carlton deposits. Measured Mineral Resources were converted to Proved Ore Reserves and Indicated Mineral Resources were converted to Probable Ore Reserves with the application of modifying factors. No Probable Ore Reserves have been derived from Measured Mineral Resources. The total Ore Reserve summary shown in Table 1.



#### Table 1 - Ore Reserve Table

	Mt	Li₂O (%)	Contained Li₂O (kt)
Open Pit			
Grants			
Proved	1.0	1.4%	14.9
Probable	0.8	1.5%	11.6
Total	1.9	1.4%	26.5
Underground			
BP33			
Proved	1.3	1.4%	18.4
Probable	1.0	1.4%	13.2
Total	2.3	1.4%	31.5
Carlton			
Proved	0.6	1.2%	7.1
Probable	1.0	1.0%	10.6
Total	1.6	1.1%	17.8
Total -			
Underground			
Proved	1.9	1.3%	25.5
Probable	2.0	1.2%	23.8
Total	3.9	1.3%	49.3
Total – All Mining			
Methods			
Proved	2.9	1.4%	40.4
Probable	2.8	1.3%	35.4
Total	5.7	1.3%	75.8

Note: Totals within this table may have been adjusted slightly to allow for rounding.

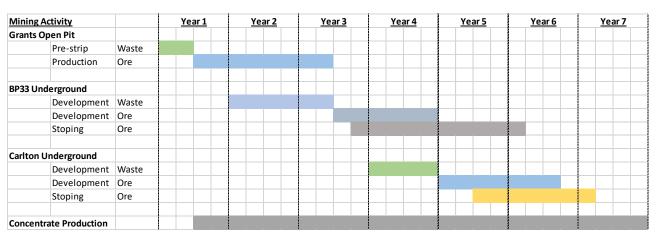


Figure 1 - Ore Reserve Schedule

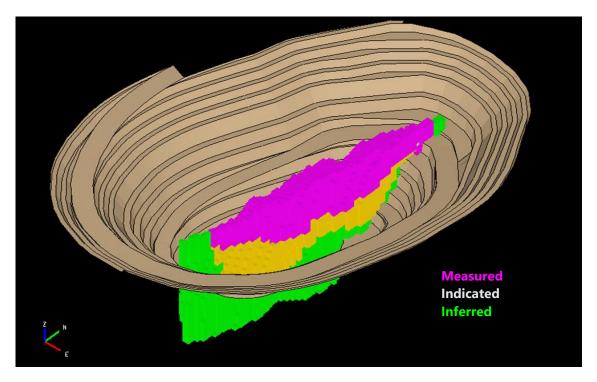


#### Grants

Core's development of the Finniss Lithium Project is initially based on the development of the Ore Reserves within the high-grade Grants deposit as standard open pit mining operations and the construction of a simple 1Mtpa Dense Media Separation (DMS) process plant to produce up to 180,000tpa of high-quality lithium concentrate with robust operating margins.

The development of the Grants open pit remains the same as that described in the April 2019 DFS (ASX announcement 17 April 2019). Mining of Grants will be undertaken by Mining Contractor using conventional open pit mining methods.

The Grants pit will be mined in two stages; Stage 1 will target early ore by reducing the volume of pre-strip waste to be mined with Stage 2 a cutback out to full pit limits.





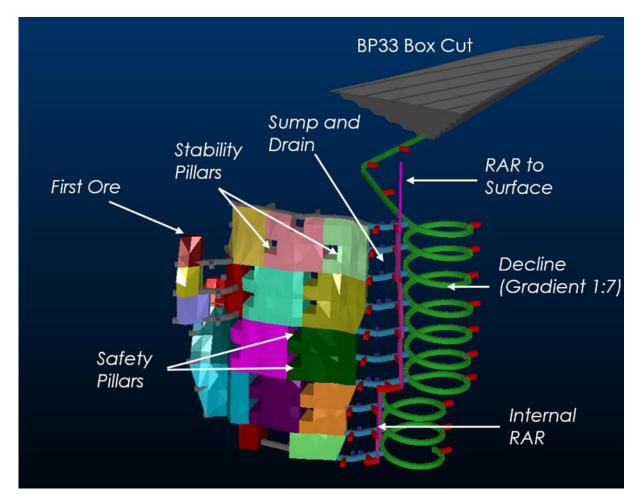
#### BP33

The BP33 deposit is located approximately 6km south of the proposed Grants open pit. Access to the BP33 underground deposit is via a 318m decline from the surface box-cut to a decline connecting the lower levels (Shown in Figure 3). BP33 is ventilated via dedicated raise bored Return Air Raise (RAR) to surface. An internal drill and blasted RAR network will provide airflow to the production areas.

The mining method selected for the BP33 deposit is sublevel open stope mining - the same as for Carlton. Internal pillars are utilised for overall stability. The narrow (5m to 25m) ore body width, vertical orientation, and competent host rock ground conditions and



internal rock pillars allows for sublevel open stope mining without back fill to be utilised as a viable low-cost mining method.



#### Figure 3 - BP33 Underground Design

The Underground Geotechnical Study for BP33 and Carlton Deposits (SRK Report) conducted by SRK Consulting (Australasia) Pty Ltd (SRK) has assessed the ground conditions and stoping dimensions for BP33 with ground support in the form of in-stope pillars and cable bolts. The recommended pillar dimensions are 15m x 15m. The square shape provides a greater load-bearing capacity than rectangular pillars.

Mining from BP33 will be done using underground production loaders. Given the sublevel open stope mining method, the majority of this will be done using remote loaders. It has been assumed that the same mining contractor would carry out underground mining at the Finniss deposits. The underground mining costs for BP33 were prepared in the same way as for Carlton.

Material is to be stockpiled on the production level or loaded directly into underground mining trucks with a 45t capacity.



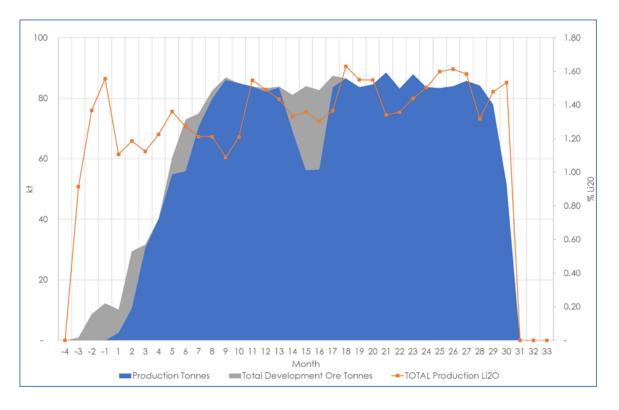
The haulage path will consist of the stope access development on the production level, the BP33 decline, and haul road (6km) to the Grants Processing facility.

Downer EDI Mining Pty Ltd. were engaged by Core to provide a quotation on the mining of Carlton and BP33 underground deposit. The majority of development and production costs were derived from the Downer EDI quote. The combined development and production ore in the preliminary BP33 mine design includes 2.25Mt at 1.40%  $Li_2O$  or A\$172/t Net Sales Return (NSR), the maximum mining production rate was limited to 1.0Mtpa, as shown in Table 2 and Figure 4.

#### Table 2 - BP33 Reserves Mining Production Summary

	Tonnes (kt)	Li₂O (%)	Net Sales Return (NSR) (\$/t)
Ore Development Tonnes	151	1.44	176
Production Tonnes	2,098	1.40	171
Total Production Tonnes	2,248	1.40	172

Note: Totals within this table may have been adjusted slightly to allow for rounding.



#### Figure 4 - BP33 Production Schedule

The BP33 underground development requires initial capital (Pre-production) of A\$23.31M (Including 10% Contingency). The total capital requirement over the Life of Mine (LOM) including pre-production is A\$45.00M (Including 10% Contingency).



The Capital Costs for the BP33 underground has been split into surface infrastructure, miscellaneous underground mining equipment, underground infrastructure and underground fixed equipment. The capital costs included in the study are derived from a quotation from a mining contractor, other suppliers and current project costs. Mining costs were benchmarked against similar projects. Mining costs are to a PFS level. Costs have been calculated for a 1.0Mtpa mining rate for BP33.

BP33 Unit Cost Summary:

- Development unit cost of A\$7,667/m.
- Production Unit Cost of A\$62.60/t.
- Processing Cost of A\$24.21/t (Including Crushing and Screening, as per the DFS).

Proved and Probable Ore Reserves were estimated for the BP33 deposit. Measured Mineral Resources were converted to Proved Ore Reserves and Indicated Mineral Resources were converted to Probable Ore Reserves with the application of modifying factors. No Probable Ore Reserves have been derived from Measured Mineral Resources. Inferred Resources were given a zero grade.

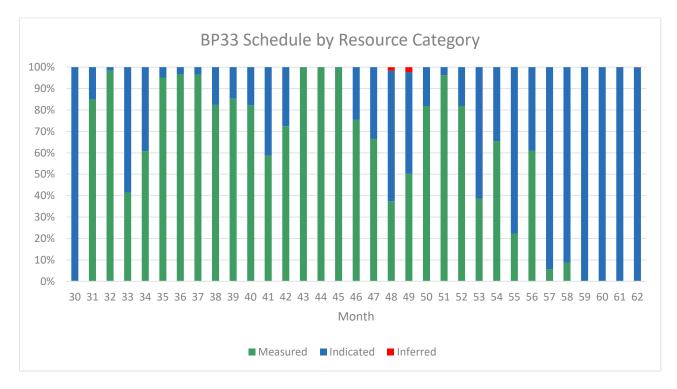


Figure 5 - BP33 Production Schedule by Resource Category



#### Carlton

The Carlton deposit is south east of the planned Grants open pit, access to the Carlton underground deposit is via a portal in the Grants open pit and a 1,100m decline (Shown in Figure 6). The 6.0m x 6.0m decline will also act as the primary ventilation intake into the mine with the exhaust to surface via a return a raise bored Return Air Raise (RAR).

The mining method selected for the Carlton deposit is sublevel open stope mining. Internal pillars are utilised for overall stability. The narrow (5m to 15m) ore body width, vertical orientation, and competent host rock ground conditions and internal rock pillars allows for sublevel open stope mining without back fill to be utilised as a viable low-cost mining method.

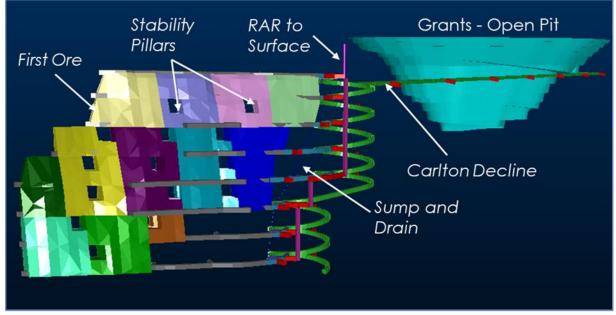


Figure 6 - Carlton Underground Design

The SRK Report has assessed the ground conditions and recommended stoping dimensions for Carlton (with ground support in the form of in-stope pillars and cable bolts).

SRK calculated a pillar factor of safety from modelled pillar stresses and pillar strengths. The recommended pillar dimensions are 15m x 15m. The square shape provides a greater load-bearing capacity than rectangular pillars.

The top of fresh rock is typically ~60m below ground level. In the stability analysis the crown pillars are considered stable. Additional development will be required to undercut crown pillars to install cable bolts and shape the top of the stoping areas. This will assist in forming a stope void that will minimise the potential to induce crown failure or subsidence as stoping progresses.

Mining from Carlton will be done using underground production loaders. The sublevel open stoping method selected requires remote loaders as it retreats along the ore drive.



Material is to be stockpiled on the production level or loaded directly into underground mining trucks with a 45t capacity. The haulage path will consist of the stope access development on the production level, the Carlton decline, the Grants open pit haul road to the Grants Processing facility.

The combined development and production ore in the preliminary Carlton mine design includes 1.65Mt at 1.08% Li<sub>2</sub>O or A\$132/t NSR, the maximum mining production rate was limited to 1.0Mtpa, as shown in Table 3 and Figure 7. The total development for Carlton is 6,979m.

Proved and Probable Ore Reserves were estimated for the Carlton deposit. Measured Mineral Resources were converted to Proved Ore Reserves and Indicated Mineral Resources were converted to Probable Ore Reserves with the application of modifying factors. No Probable Ore Reserves have been derived from Measured Mineral Resources. Inferred Resources were given a zero grade.

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Table 3 - Carlton Reserves Minina Production Summary

	Tonnes (kt)	Li₂O (%)	Net Sales Return (NSR) (\$/t)
Ore Development Tonnes	104	1.12	138
Production Tonnes	1,544	1.08	132
Total Production Tonnes	1,648	1.08	132



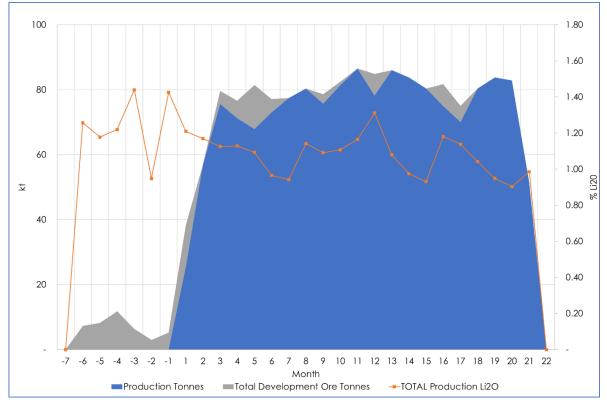


Figure 7 - Carlton Production Schedule

It is assumed that a contract mining company will be used, and their equipment hire fleet would be utilised, this has been included into the unit production and development mining costs.

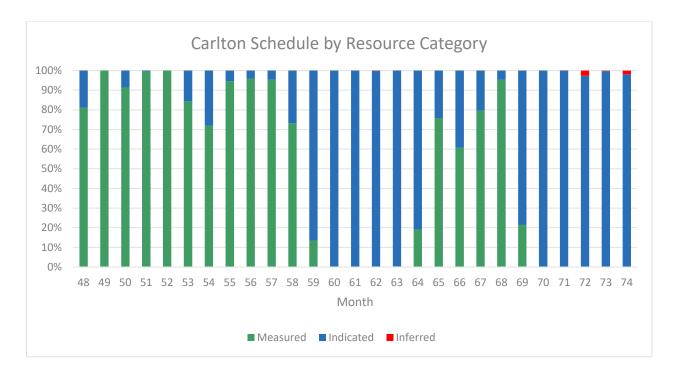
Downer EDI Mining Pty Ltd. were engaged by Core to provide a quotation on the mining of Carlton and BP33 underground deposit. The majority of development and production costs were derived from the Downer EDI quote. The Carlton underground requires initial capital (Pre-production) of A\$30.78M (Including 10% Contingency). The total capital requirement over the Life of Mine (LOM) including pre-production is A\$52.24M (Including 10% Contingency).

The Capital Costs for the Carlton underground has been split into surface infrastructure, miscellaneous underground mining equipment, underground infrastructure and underground fixed equipment. The capital costs included in the study are derived from a quotation from a mining contractor, other suppliers and current project costs. Mining costs were benchmarked against similar projects. Mining costs are to a PFS level. Costs have been calculated for a 1.0 Mtpa mining rate for Carlton.

Carlton Unit Operating Cost Summary:

- Development unit cost of A\$7,360/m.
- Production Unit Cost of A\$62.83/t.
- Processing Cost of A\$24.21/t (Including Crushing and Screening).





#### Figure 8 - Carlton Production Schedule by Resource Category

#### **SCOPING STUDY**

The Scoping Study extended the underground mining methodology established in the PFS to the Inferred resources immediately below Grants, BP33 & Carlton. These individual prospects are discussed in the following sections.

#### Grants Underground

The Scoping Study examined the material immediately below the Grants Open Pit. Two levels were identified as amenable to extraction by sub-level open stope mining. The material contained within the practical mining shapes was 97% Inferred and 3% Indicated.

Table 4 - Grants Underground Scoping Study Mining Production Summary

	Tonnes (kt)	Li₂O (%)	Net Sales Return (NSR) (\$/t)
Development Ore Tonnes	35	1.42	174
Production Ore Tonnes	478	1.33	163
TOTAL Ore Tonnes	513	1.33	163



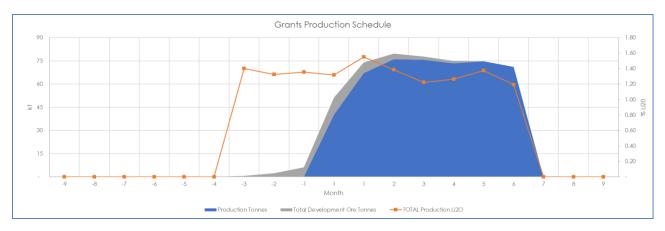


Figure 9 - Grants Underground Scoping Study Production Schedule

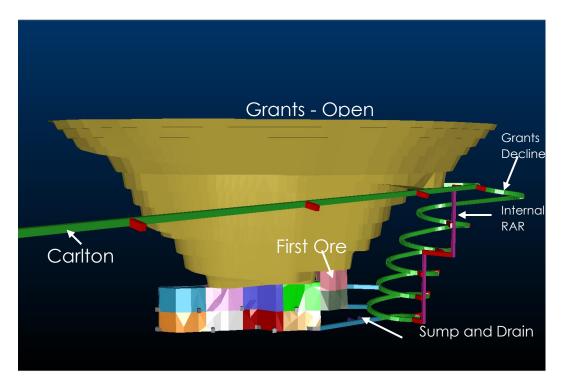


Figure 10 - Grants Underground Design



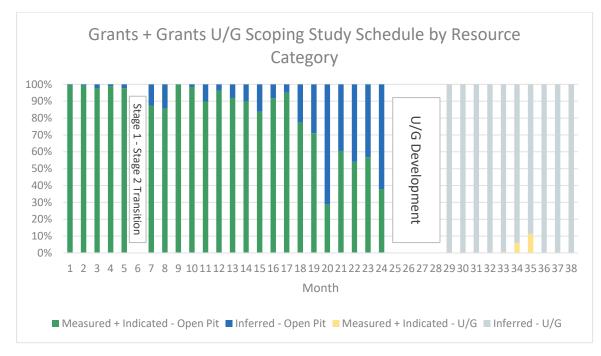


Figure 11 - Grants Open Pit & Grants U/G Scoping Study Schedule by Resource Category

There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised.

The void that is created by mining Grants (Open Pit plus the Scoping Study) is strategically important. The currently approved Finniss Project has five (5) years of tails storage. For the Finniss Project to operate beyond five (5) years an additional tails storage solution is required. For this reason, the Grants Underground is forecast to be completed inside the first five years of the Finniss Project and is included in the PFS Schedule. The total amount of Inferred material included in the SS Schedule is 29%. The Grants Underground accounts for 6.1% of this.

#### BP33

An additional 599,891 tonnes of Inferred resources were accessed immediately below the PFS design. The same mining method as the PFS is assumed. The service infrastructure established for the PFS development is considered adequate to support the additional four (4) Inferred development levels. The BP33 Scoping Study schedule comprises 79% Measured & Indicated and 21% Inferred.



#### Table 5 - BP33 Scoping Study Mining Production Summary

	Tonnes (kt)	Li <sub>2</sub> O (%)	Net Sales Return (NSR) (\$/t)
Ore Development Tonnes	165	1.44	176
Production Tonnes	2,683	1.40	171
TOTAL Production Tonnes	2,848	1.40	171

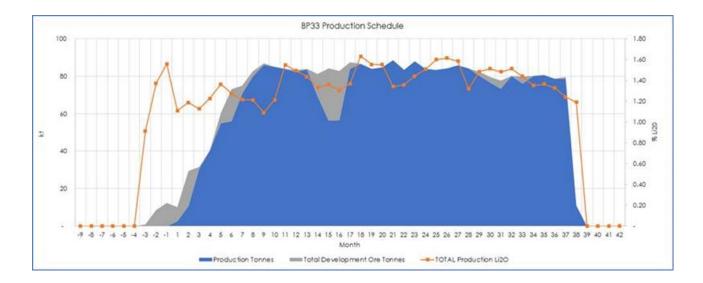


Figure 12 - BP33 Scoping Study Production Schedule



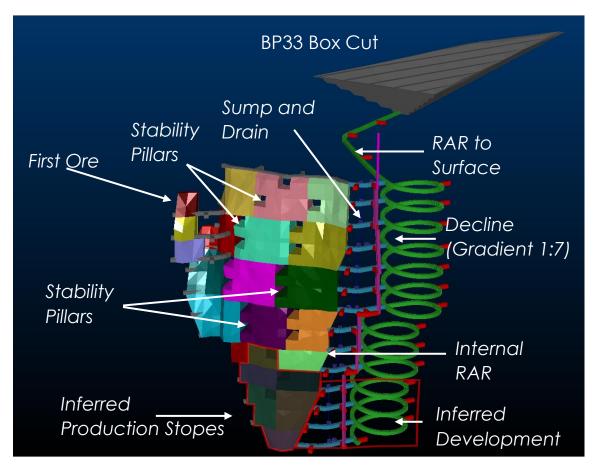
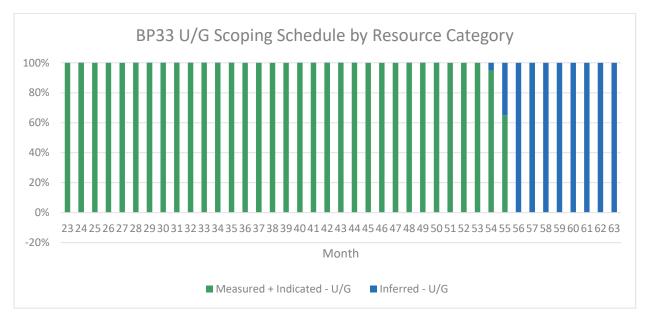


Figure 13 - BP33 Scoping Study Design



#### Figure 14 - BP33 Scoping Study Schedule by Resource Category

There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised.



#### Carlton

An additional 1,241,255 tonnes of Inferred resources were accessed immediately below the PFS design. The same mining method as the PFS is assumed. The infrastructure established for the PFS development is considered adequate to support the additional seven (7) Inferred development levels. The Carlton Scoping Study schedule comprises 57% Measured & Indicated and 43% Inferred. Considerable scope to upgrade the Inferred resource category at Carlton is evident.

Table 6 - Carlton Scoping Study Mining Production Summary

	Tonnes (kt)	Li₂O (%)	Net Sales Return (NSR) (\$/t)
Ore Development Tonnes	147	1.20	147
Production Tonnes	2,743	1.12	137
TOTAL Production Tonnes	2,889	1.12	138

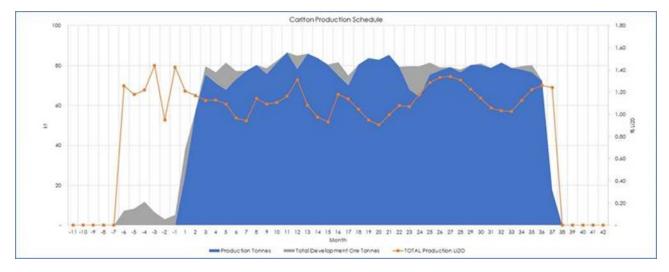


Figure 15 - Carlton Scoping Study Mining Production Schedule



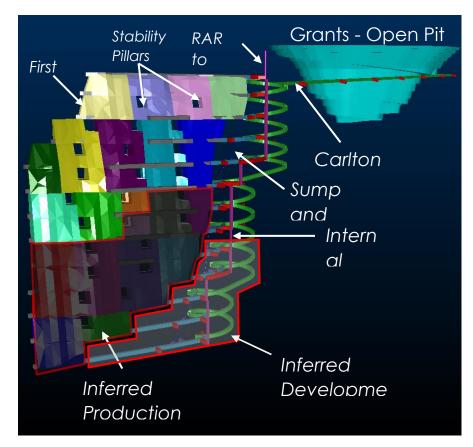
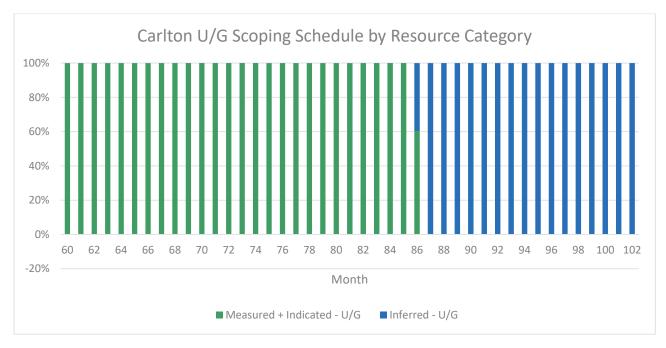


Figure 16 - Carlton Scoping Study Design



#### Figure 17 - Carlton Scoping Study Schedule by Resource Category

There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised.



Mining Activity	Ĺ		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
Grants Open Pi	it										
	Pre-strip	Waste									
	Production	Ore									
Grants Underg	round										
	Development	Waste									
	Development	Ore									
	Stoping	Ore									
BP33 Undergro	und										
	Development	Waste									
	Development	Ore									
	Stoping	Ore									
Carlton Underg	ground										
	Development	Waste									
	Development	Ore									
	Stoping	Ore									
Concentrate Pr	oduction										

The combined Scoping Study schedule is illustrated in the figure below.

#### Figure 18 - Scoping Study Schedule

The total amount of Inferred material included in the Scoping Study Schedule is 29%.

#### **NEXT STEPS**

The Company is considering the next steps with further work to potentially include:

#### Geological

- Additional drilling and geological analysis to convert Inferred material within Grants, BP33 Carlton to Measured or Indicated.
- Identifying Exploration targets within Carlton and BP33 that can be accounted for in underground designs.

#### Geotechnical

- Expand the geotechnical data collection rock mass characterisation and stress measurements.
- Complete further numerical modelling and assessment of mine design and execution.

#### Ventilation

• Develop detailed ventilation models for Carlton and BP33 deposits.



#### Mine Design

- Include additional Geological, Geotechnical, Ventilation requirements into the mine design.
- Increased level of detail in underground designs.

#### Production

- Detailed production schedules integrating the production from each underground with the open pit.
- Overall production capability.

#### Costs

• Further evaluation and quotes will be sourced to increase the confidence.

#### Infrastructure

• Efficiencies given the longer mine life will be examined.



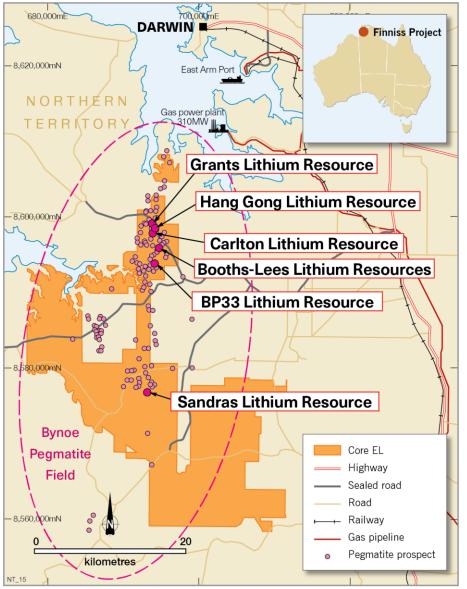


Figure 19 - Map of the Finniss Project area, showing the location of the various resources



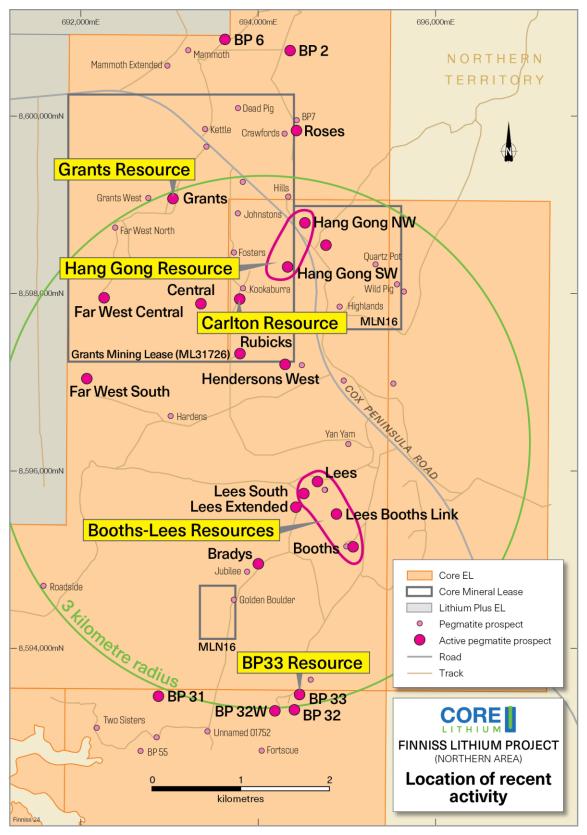


Figure 20 - Map of the norther Finniss Project area, showing the close proximity of Grants, BP33, Carlton, Booths, Lees and Hang Gong Resources. The Sandras resource is in the southern region.



This announcement has been approved for release by the Core Lithium Board.

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#### Important and Cautionary Notes

#### **Cautionary Statement**

The April 2019 DFS results are based upon the updated Grants Mineral Resource of 22 October 2018 and the update BP33 Mineral Resource Estimate of 6 November 2018. The Mineral Resource contains Measured, Indicated and Inferred Mineral Resources outlined above. There is sufficient Measured & Indicated Mineral Resources to complete the production schedule and achieve payback. 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.

For the Grants Open Pit the Inferred Mineral Resource is not the determining factor in determining the viability of the Finniss Project as the Inferred Mineral Resource represents only 4.4% of the production during the 18 month pay-back period in the Reserve Case. The DFS Reserve Case contains 14% Inferred material. The DFS does not rely upon additional Mineral Resources from the company's other prospects.

For the BP33 & Carlton Undergrounds only 0.15% and 0.22% respectively of the total production from Underground is based upon Inferred material at zero grade.

#### Competent Person Statements

The Mineral Resources and Ore Reserves underpinning the Production Target have been prepared by competent persons in accordance with the requirements of the JORC code.

The information in this release that relates to the Estimation and Reporting of Open Pit Ore Reserves is based on, and fairly represents, information and supporting documents compiled by Mr Blair Duncan.

The information in this release that relates to the Estimation and Reporting of Underground Ore Reserves is based on, and fairly represents, information and supporting documents compiled by Mr Bernard Peters employed as Technical Director – Mining by OreWin Pty Ltd. and is a Fellow of the Australasian Institute of Mining and Metallurgy. Bernard Peters is a Competent Person as defined by the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves", having five years' experience that is relevant to the style of mineralisation and type of deposit and activity described in the PFS, Bernard Peters consents to the inclusion in the Public Report of the matters based on their information in the form and context in which it appears.

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 and Ore Reserve estimates (as applicable) in the announcements "Grants Lithium Resource Increased by 42% ahead of DFS" dated 22 October 2018, "Finniss Feasibility Study and Maiden Ore Reserve" dated 17 April 2019 and "Finniss Lithium Resource Increased by over 50%" dated 15 June 2020, continue to apply and have not materially changed. The Ore Reserves and 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.

#### 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, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, Mineral Resources, results of exploration and relations expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'likely',' believe','estimate', 'expect','intend','may','would','could','should','scheduled','will','plan','fore cast','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 materially different Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance or achievements 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, uncertainties and other factors set out herein, including but not limited to general business, economic, competitive, political and social uncertainties; the actual results of current exploration activities; conclusions of economic evaluations; 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, equipment 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 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 not place 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, or 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-looking statements in relation 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 in real terms (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 -20% to +20%. This judgement is made following consideration of the basis studies and the features outlined in the Cost Estimation Handbook Second Edition Monograph 27 AusIMM, The Minerals Institute.



List Rule 5.9.1	Comments
Material Assumptions	The April 2019 DFS and the Open Pit Ore Reserve Estimate contained within it is based upon the Grants and BP33 Mineral Resource Estimates released to the ASX on the 22 <sup>nd</sup> October and 6 <sup>th</sup> November 2018, by Core Exploration, competent persons: Mr. Graeme McDonald (Consulting Geologist to Core Exploration Limited) & Mr Blair Duncan (General Manager Project Development Core Exploration Limited). The Minerals Resources are reported inclusive of the Ore Reserves. Mr. Duncan has relied on the integrity and accuracy of the Mineral Resource for this Ore Reserve estimate.
	This PFS and the Underground Ore Reserve Estimate contained within it is based upon the Grants and BP33 Mineral Resource Estimates released to the ASX on the 15 <sup>th</sup> June 2020, by Core Exploration, competent persons: Mr. Graeme McDonald (Consulting Geologist to Core Lithium Limited) & Mr Bernard Peters (Technical Director – Mining OreWin Pty Ltd). The Minerals Resources are reported inclusive of the Ore Reserves. Mr. Peters has relied on the integrity and accuracy of the Mineral Resource for this Ore Reserve estimate.
Criteria for Classification	The resource classification has been applied to the Mineral Resource Estimate based on the drilling data spacing, grade and geological continuity and data integrity. The resource has been classified on the following basis.
	<ul> <li>Portions of the model that have drill spacing of better than 25m by 30m, and where the confidence in the geology, mineralisation and resource estimation is considered high and would allow the application of modifying factors in a technical and economic study have been classified as Measured Mineral Resources.</li> <li>Areas that have drill spacing of greater than 25m by 30m, and/or with lower levels of confidence in the geology, mineralisation and resource estimation or potential impact of modifying factors have been classified as Indicated Mineral Resources.</li> </ul>
	<ul> <li>Areas that have drill spacing of greater than 25m by 30m, and with low levels of confidence in the geology, mineralisation and resource estimation or potential impact of modifying factors have been classified as Inferred Mineral Resources.</li> <li>For Ore Reserve Estimation purposes Measured Mineral Resources only convert to Proved Reserves or Probable Reserves &amp; Indicated Mineral Resources convert to Probable Reserves.</li> </ul>
Mining Method Selection	A conventional open pit mine method was chosen as the basis of the Grants deposit in the DFS (ASX: Finniss Definitive Feasibility Study & Maiden Ore Reserve 17th April 2019). Ore occurs approximately 50m below surface meaning pre-stripping is required. Pre-stripping has been allowed for. Selective mining methods of the ore zone have been assumed with a Smallest Mining Unit (SMU) size of 5m x 5m x 2.5m (XYZ) applied to the resource block model regularisation process to produce a diluted



	mining model. This SMU size was selected as the most appropriate block size considering the mining fleet and mining methods proposed by the preferred Mining Contractor Tender submission. Selective ore mining will also be supported by machine guidance systems, production blasthole grade control processes, and the highly visual nature of ore in comparison to the waste material. The mining method selected for the BP33 and Carlton deposits is sublevel open stope mining. Internal pillars are utilised for overall stability. The narrow (5 to 15 m) ore body width, vertical orientation, and competent host rock ground conditions and internal rock
	pillars allows for sublevel open stoping mining without back fill to be utilised as a viable low-cost mining method. The consolidated mine schedule is based on a processing plant nameplate capacity of 1.0Mtpa (dry). Mining method productivities are assumed as follows:
	Open Pit
	The mining excavator fleet proposed by the preferred Mining Contractor that has an average annual mining capacity of 16 Mtpa (dry) over the mine life. Grants will be mined in two stages with an initial pit followed by a final cutback.
	Underground
	It is assumed that a contract mining company will be used, and their equipment hire fleet would be utilised, this has been included into the unit production and development mining costs.
	The development profiles of 5.0 m W x 5.5 m H have been used for Carlton and BP33, this will allow the same or similar fleet of underground equipment to move between the two underground mines.
	A diluted mining model has been used to develop the equipment based mine schedules for Open Pit and Underground and assumes effective operation of the mining fleet and is based on realistic utilisation estimates.
	Mining Infrastructure required to support the mine plan includes waste rock dumps, ROM pad, haul roads, crusher and processing plant, tailings storage facility, explosives storage facility, water storage, workshops and other buildings required for a contract mining operation.
Processing Method	For Lithium ore the DFS economics considered processing comprising dense media gravity separation (DMS) of the 0.5mm to 6.3mm fraction after P100 crushing to 6.3mm. This process is considered lowest risk methodology for the ore type comprising zoned, very coarse grained, spodumene- $\alpha$ pegmatite. The rejects will be stockpiled for possible future use, but nil revenue was attributed to them. The minus 0.5mm fines are to be placed in a purpose built tailings storage facility (TSF) but essentially thrown away. Four generations of metallurgical test work was used to



	arrive at the final process flowsheet & the competent person visited comparable operations in WA to satisfy himself that the flowsheet of a full scale plant is applicable. The introduction of a re-crush facility on DMS middlings was key to consistently producing grades of 5.5% or better at acceptable recoveries of over 70%. This necessitated a primary and secondary DMS circuit on the coarser +2mm fraction, so that the secondary coarse DMS floats could be re-crushed and recycled.
	Separating the -2mm +0.5mm fines and incorporating a separate fines DMS circuit was considered to be necessary to ensure the plant design was sufficiently robust to cater for any unexpected variability in the ore body.
Cut-off Grades	The Mineral Resource provided was a geologically domained resource; this geological model was modified for ore loss and dilution and evaluated to determine which blocks produced cash surplus when treated as ore. The Ore Reserve was estimated using a 0.75% Li <sub>2</sub> O cutoff. The cut-off grade contemplates all pre-tax costs associated with the processing and selling of a Li <sub>2</sub> O concentrate product. The following costs:
	<ul> <li>Incremental ore haulage to the process plant RoM</li> <li>Stockpile re-handle</li> <li>Processing</li> <li>Road transport</li> <li>Ship loading</li> <li>Royalties</li> <li>General overhead cost and administration</li> </ul>
	are all easily paid for by the 0.75% Li <sub>2</sub> O cutoff. The revenue was determined using an average price for Li <sub>2</sub> O concentrate of US\$744 per tonne and an exchange rate of US\$0.65 per AU\$1.00. Process recoveries were applied as outlined below under "Metallurgical Factors or Assumptions".
Estimation Methodology	<ul> <li>For both Grants and BP33 grade estimation of lithium has been completed using Ordinary Kriging (OK) into mineralised and unmineralized pegmatite domains using Micromine software.</li> <li>Variography has been undertaken on the grade domain composite data. Variogram orientations are largely controlled by the strike and dip of the mineralisation.</li> <li>No selective mining units are assumed in the Mineral Resource estimate. SMU analysis was carried out as part of the Ore Loss &amp; Dilution analysis when Mining Block Models where created prior to Reserve Estimation occurring.</li> </ul>
Material Modifying Factors	<ul> <li>Material modifying factors used in this DFS are as follows:</li> <li>Open Pit Ore loss and Dilution factors are based on the diluted resource block models developed from the regularisation process. Global ore loss and dilution results for both pits are:</li> </ul>



Grants Resource	Ore (dry tonnes)	Li <sub>2</sub> 0%	% Ore Tonnage
Undiluted	2,884,603	1.48	-
Ore Loss (OL)	268,133	1.30	9.3%
Dilution (D)	160,390	0.09	5.6%
Diluted (Undil - OL + D)	2,776,860	1.42	-3.7%

- Underground Dilution factors are based on practical underground void designs intersecting with the resource block models. The resulting dilution factors are as follows:
  - BP33 8.5%
  - Carlton 15.7%
- Sales price assumptions were as follows:

6.0 % Concentrate								
<u>US\$/t (FOB)</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>
Real	\$584	\$684	\$788	\$870	\$801	\$785	\$761	\$713

• Metallurgical recoveries

• Metallurgical recoveries			
Nagrom Test work Campaign	T	2603	
Method	DMS with Ref	lux Classification	
Details	-6.3mm +2mm; -2mm +0.5mm with re-crush		
	<u>Grade Li<sub>2</sub>O</u>	<u>Overall</u> <u>Recovery</u>	
Test work Result	6.07%	69.8%	
Interpolated Results			
Target Grade	6.0%	70.0%	
Target Grade	5.5%	71.7%	
Target Grade	5.0%	73.7%	



# JORC Code, 2012 Edition – Table 1 Report Finniss Project Update

### Section 1 Sampling Techniques and Data

# (Criteria in this section apply to all succeeding sections)

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Drilling geology, assays and resource estimation results reported herein relate to reverse circulation (RC) and diamond drillhole (DDH) drilling employed by Core Lithium Ltd (CXO) and Liontown Resources Ltd (LTR) at BP33, Carlton, Hang Gong and Booths-Lees, over the period late 2016 to late 2019 (refer to "Drill hole information" section below).</li> <li>Sampling methods</li> <li>RC drill spoils over all programs were collected into two sub-samples: <ul> <li>1 metre split sample, homogenized and cone split at the cyclone into 12x18 inch calico bags. Weighing 2-5 kg, or 15% of the original sample.</li> <li>20-40 kg primary sample, which for CXO's drilling was collected in 600x900mm green plastic bags and retained until assays had been returned and deemed reliable for reporting purposes. In the case of LTR's drilling, this primary sample was laid out directly on the ground in rows, without using a green bag.</li> </ul> </li> <li>RC sampling of pegmatite for CXO's assays was done on a 1 metre basis. 1m-sampling continued into the barren wall-zone of the pegmatite and then a 3m composite was collected from the immediately surrounding barren phyllite host rock.</li> <li>LTR's RC samples were homogenised by riffle splitting prior to sampling and then assayed as 2m composites (collected via a scoop from the sample piles) with 2-3kg submitted for assay. If a composite sample returned a significant result (typically &gt;0.5% Li<sub>2</sub>O) then the original individual metre intervals were also submitted for assay.</li> <li>Drill core was collected directly into trays, marked up by metre marks and secured as the drilling progressed. Geological logging and sample interval selection took</li> </ul>

place soon after.



Drilling	<ul> <li>Drill type (e.g. core, reverse circulation, open-hole hammer,</li> </ul>	<ul> <li>DDH Core was transported to a local core preparation facility and cut firstly into half longitudinally along a consistent line between 0.3m and 1m in length, ensuring no bias in the cutting plane. On some occasions, without bias, half core was then cut into two further segments. Either a half or quarter core sample was then collected on a metre basis (where possible), bagged and sent to the North Australian Laboratory in Pine Creek (NT) or Nagrom laboratory in Perth (WA) for analysis.</li> <li>Half core from selected DDH holes was provided to Nagrom for metallurgical testwork. The remaining quarter core is retained at Core's storage shed in Berry Springs.</li> <li>DDH sampling of pegmatite for assays was carried out over the sub-1m intervals described above. 1m-sampling continued into the barren phyllite host rock.</li> <li>Drilling techniques used for the drillholes, including precollars, were:</li> </ul>
techniques	rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>Reverse Circulation (RC) using a face sampling bit. Drilling was carried out by a number of operators but using the same technique. These included Geo Drilling (Bachelor NT; Schram 450 with 5-inch bit), Swick Mining Services (Perth WA; Schram 685 with 5.5-inch bit), Bullion Drilling (Barossa Valley SA; Schram W450 with 5 inch bit) and WDA Drilling (Humpty Doo NT; UDR 1000 with 5.5-inch bit).</li> <li>Diamond Core Drilling (DDH) was undertaken using standard HQ core assembly (triple tube), drilling muds or water as required, and a wireline setup. Holes were either cored from surface or precollared by mud rotary down to rigid bedrock (~60m) or by RC down to a depth just above the target pegmatite. The rigs used for the DDH were contracted from a number of different operators, including track-mounted and truck-mounted rigs operated by WDA Drilling Services, Humpty Doo (NT) and GMP Exploration Drilling, Mildura (VIC).</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>RC drill recoveries were visually estimated from volume of sample recovered. The majority of sample recoveries reported were above 90% of expected.</li> <li>RC samples were visually checked for recovery, moisture and contamination and notes made in the logs.</li> <li>The rigs splitter was emptied between 1m samples by hammering the cyclone bin with a mallet. The set-up of the cyclone varied between rigs, but a gate mechanism was used to prevent inter-mingling between metre intervals. The cyclone and splitter were also regularly cleaned by opening the doors, visually checking, and if</li> </ul>



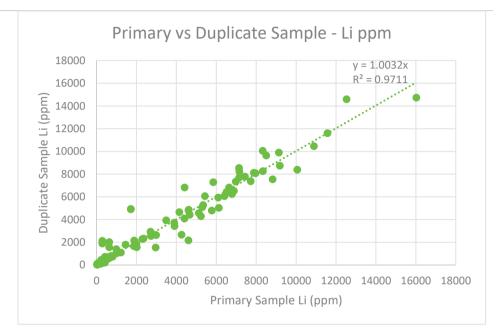
Sub-sampling techniques and	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and</li> </ul>	<ul> <li>RC chip trays and DDH core trays are photographed and stored on the CXO server.</li> <li>Geotechnical logging was carried out on the oriented DDH core in due course. Selected holes were also logged using downhole tools, collecting a variety of information for geotechnical purposes.</li> <li>The majority of the mineralised samples were collected dry, as noted in the drill logs and database.</li> </ul>
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>While quarter core sampling has inherent risks of sampling bias due to the small sample size, there has been no material bias recognised. This involved a detailed assessment of assay grade vs drill core geology, including visual spodumene concentration.</li> <li>Detailed geological logging was carried out on all RC and DDH drill holes. The geological data is suitable for inclusion in a Mineral Resource Estimate (MRE).</li> <li>Logging recorded lithology, mineralogy, mineralisation, weathering, colour, and other sample features. RC chips are stored in plastic RC chip trays. DDH core is stored in plastic core trays.</li> <li>All holes were logged in full, including the RC and mud rotary precollars.</li> <li>Pegmatite sections are also checked under a single-beam UV light for spodumene identification on an ad hoc basis. These only provide indicative qualitative information.</li> </ul>
		<ul> <li>build-up of material was noted, the equipment cleaned with either compressed air or high-pressure water. This process was in all cases undertaken when the drilling first penetrated the pegmatite mineralization, to ensure no host rock contamination took place.</li> <li>Drill collars are sealed to prevent sample loss and holes are normally drilled dry to prevent poor recoveries and contamination caused by water ingress. Wet intervals are noted in case of unusual results.</li> <li>There is no observable relationship between recovery and grade at a project scale, and therefore no sample bias is anticipated.</li> <li>DDH core recoveries were measured using conventional procedures utilising the driller's markers and estimates of core loss, followed by mark up and measuring of recovered core by the geologist or geotechnician.</li> </ul>



ample whether sampled wet or dry.	• The field sample preparation followed industry best practice.
<ul> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>For CXO drilling this involved collection of RC samples from the cone splitter on the drill rig into a calico bag for dispatch to the laboratory.</li> <li>LTR samples were collected as 1m riffle split samples from the rig into calico bags. Composite samples were obtained via a scoop from the primary piles on the ground.</li> <li>The sample sizes are considered more than adequate to ensure that there are no particle size effects relating to the grain size of the mineralisation.</li> <li>Quarter or Half Drill Core sample intervals were constrained by geology, alteration or structural boundaries, intervals varied between a minimum of 0.3 metres to a maximum of 1 m. The core is cut along a regular Ori line to ensure no sampling bias.</li> <li>Field RC duplicates</li> <li>A field duplicate sample regime is used to monitor sampling methodology and</li> </ul>

- homogeneity of RC drilling at Carlton. The typical procedure was to collect
  Duplicates via a spear of the green RC bag (CXO's drilling) or primary sample pile
  (LTR's drilling), having collected the Original in a calico bag. Trying to split the 2-3kg
  calico bag into an Original and a Duplicate has inherent dangers, least of all
  reducing the sample mass. However, comparing rotary split sample with a spear
  sample also has some element of incompatibility. The expectation would be a high
  degree of variability in the spear sample, because of the heterogenous and
  stratified RC bag, but overall it should statistically match the split original sample.
- The duplicates cover a wide range of Lithium values.
- Results of duplicate analysis show an acceptable degree of correlation given the heterogeneous nature of the pegmatite and the methodology for the primary sample (see chart below).





#### Sample heterogeneity

- Given the pegmatite minerals, including the spodumene, are very coarse grained, there is expected to be an issue of heterogeneity. The sample size for NQ drill core is borderline, and this is why CXO have drilled using a larger HQ diameter. Assaying of coarse rejects as part of the Umpire process in 2017 showed that there is good correlation between the original and duplicate samples at that scale. However, there is assay variability from one metre to the next that reflects the heterogeneity. This is evident when comparing assay profiles for twinned DDH and RC holes at the BP33 Deposit. RC tend to exhibit a flatter more consistent trend. This is because RC samples a larger volume of material for each metre and flattens out the fluctuations.
- Quarter or half core is cut as described above, bagged and sent to the laboratory



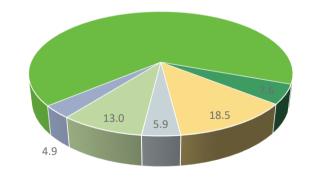
		<ul> <li>for analysis. As discussed, the heterogeneity of pegmatite core material means it is not suitable for "second-half" or "second-quarter" duplicate analysis. Regardless, a small set of duplicates was submitted, showing moderate correlation, but no bias.</li> <li>Sample preparation CXO drilling <ul> <li>Sample prep occurs at North Australian Laboratories ("NAL"), Pine Creek (NT) or Nagrom Laboratory in Perth (WA).</li> <li>DDH samples are crushed to a nominal size to fit into mills, approximately -2mm. RC samples do not require any crushing, as they are largely pulp already. <ul> <li>A 1-2 kg riffle-split of RC Samples are then prepared by pulverising to 95% passing - 100 um.</li> <li>In 2017, CXO's samples were pulverized in a Kegormill, a vertical spindle-based pulveriser. In mid-2017, Steel Ring Mills were installed at NAL to reduce the iron contamination that was recognised in the 2017 Drilling program assays. The Kegormill was not used for any Carlton, Hang Gong or Lees-Booths samples. It was, however, used for a small portion of the BP33 samples. </li> </ul></li></ul></li></ul>
		<ul> <li>Sample prep occurred at ALS in Perth (WA).</li> <li>RC Samples were rifle split to a max of 3kg and then prepared by pulverising to 85% passing -75 um. This took place in an LM5 ring mill.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>CXO drilling</li> <li>Sample analysis also occurs at North Australian Laboratories, Pine Creek, NT.</li> <li>A 0.3 g sub-sample of the pulp is digested in a standard 4 acid mixture and analysed via ICP-MS and ICP-OES methods for the following elements: Li, Cs, Rb, Sr, Nb, Sn, Ta, U, As, K, P and Fe. In mid-2018, sulphur was added to the element suite. The lower and upper detection range for Li by this method are 1 ppm and 5000 ppm respectively.</li> <li>During the drilling program a 3000 ppm Li trigger was set to process that sample via a fusion method. The fusion method was - a 0.3 g sub-sample is fused with 1g of Sodium Peroxide Fusion flux and then digested in 10% hydrochloric acid. ICP-OES is used for the following elements: Li, P and Fe. The lower and upper detection range</li> </ul>



for Li by this method are 10 ppm and 20,000 ppm respectively.

- A number of drill quarter core samples have been tested for specific gravity via three independent methods, immersion, gas pychnometry and wet pychnometry.
- Selected drillholes were also assayed for a full suite of elements, including REEs and gold.
- A barren flush is inserted between samples at the laboratory.
- The laboratory has a regime of 1 in 8 control subsamples.
- NAL utilise standard internal quality control measures including the use of Certified Lithium Standards and duplicates/repeats.
- Approximate CXO-implemented quality control procedures for the drilling include:
  - One in twenty certified Lithium ore standards
  - One in twenty duplicates
  - One in twenty blanks
- A summary of sample types for the last 12 months is illustrated below.





Samples Field Duplicates Lab Duplicates Field CRM's Lab CRM's Blanks



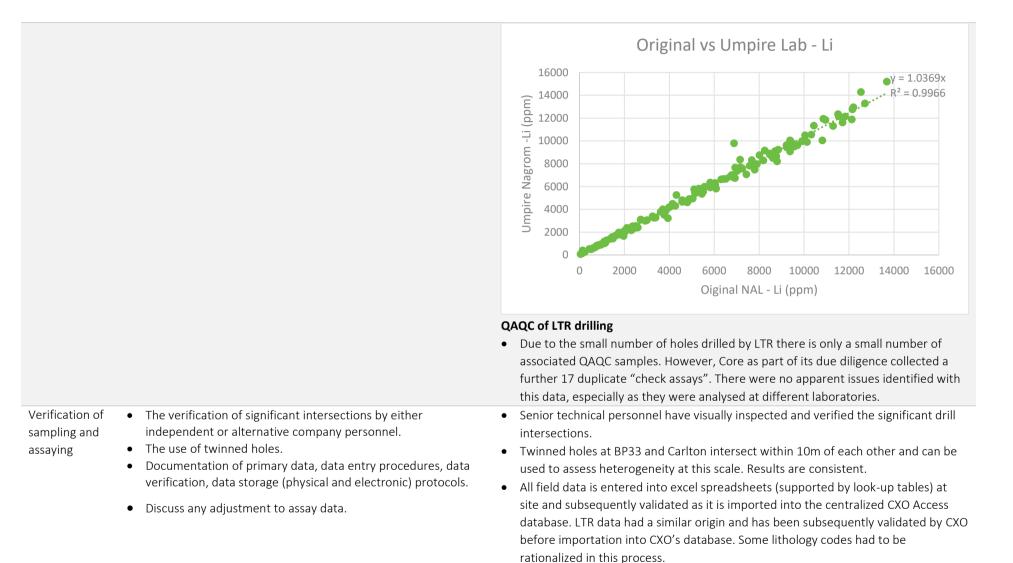
#### LTR drilling

• A sub-sample of the pulp was assayed by sodium peroxide fusion ICPMS using method codes ME-ICP89 (K, Li, P) and ME-MS91 (Cs, Nb, Rb, Sn, Ta) at ALS in Perth.

### QAQC of CXO Drilling data

- The field and laboratory standards reported back with an excellent correlation. Overall the standards average within 1% of the expected value for Li.
- The data from the blanks pulverised and assayed at NAL indicate that the Li content is very low (average 12 ppm) and well below the effective cut-off grade used for the significant intercepts.
- The baseline iron content of blanks is 3084 ppm Fe, which is indicative of Iron being stripped from the steel pulverising equipment at the laboratory. This stripping of metal obviously has an effect on the Fe content of the Lithium bearing samples as well.
- Field duplicates were discussed above.
- There were no apparent issues identified with any of this data.
- CXO runs regular Umpire analysis and has found excellent agreement in the past. Umpire samples for the last 12 months is graphically illustrated below. A small (3%) under-reporting at NAL with respect to Nagrom implies that assay data used for the MRE are slightly conservative.







Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Hard copies of survey and sampling data are stored in the local office and electronic data is stored on the CXO server.</li> <li>Metallic Lithium percent was multiplied by a conversion factor of 2.15283/10000 to report Li ppm as Li<sub>2</sub>O%.</li> <li>The current assay database is known to contain Fe data that is affected by variable levels of Fe contamination that is difficult to correct. For this reason, Fe was not estimated as part of the current MRE as it would be misleading.</li> <li>Differential GPS has been used to determine all but a few of the older collar locations, such as those drilled by Liontown ("LBRC" prefix). Collar position audits are regularly undertaken, and no significant issues have arisen.</li> <li>The grid system is MGA_GDA94, zone 52 for easting, northing and RL.</li> <li>Most of the CXO drilled RC hole traces were surveyed by north seeking gyro tool operated by the drillers and the collar is oriented by a line of sight compass and a clinometer. LTR holes and a small number of the earlier CXO holes were surveyed with a digital camera.</li> <li>Drill hole deviation has been minor and predictable in the most part. However, for the deeper holes, deviation was significant in the lower parts of the holes as a result of hard bedrock. Despite this, the holes still tested the targets roughly oblique to the strike of the pegmatite, which is acceptable for resource drilling. In any case, the gyro down hole survey has accurately recorded the drill traces and any deviation from the planned program can be accommodated in a 3D GIS environment.</li> <li>The local topographic surface used in the MRE was generated from digital terrain models supplied by CXO. This DTM is also used to generate the RL of collars for which there was DGPS data. Cross-checking by CXO against DGPS control points indicates that this DTM-derived RL is within 1m of the true RL.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> </ul>	<ul> <li>The nominal drill hole spacing varies from deposit to deposit. At Carlton and BP33, the spacing is 30 to 40 metres between drill sections. Most sections have had more than one hole drilled. The drill intercept spacing down dip is roughly 35m. At Hang Gong and Booths-Lees the drill spacing is wider, usually about 80m (strike) and 50m (dip) for Inferred resources. Details are provided in the "Estimation and modelling</li> </ul>



	•	Whether sample compositing has been applied.	<ul> <li>techniques" section below.</li> <li>The mineralisation and geology show very good continuity from hole to hole and will be sufficient to support the definition of a Mineral Resource and the classifications contained in the JORC Code (2012 Edition).</li> <li>All mineralised intervals reported are based on a one metre sample interval.</li> </ul>
Orientation of data in relation to geological structure	•	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	<ul> <li>Drilling is oriented approximately perpendicular to the interpreted strike of mineralization (pegmatite body) as mapped. Because of the dip of the hole, drill intersections are apparent thicknesses and overall geological context is needed to estimate true thicknesses.</li> <li>Two holes drilled at Carlton recently by CXO (NRC094 and NRC095) were designed to establish the weathering profile and were therefore drilled to a large extent down-dip. These intercepts thus do not reflect true thickness.</li> <li>No sampling bias is believed to have been introduced.</li> </ul>
Sample security	•	The measures taken to ensure sample security.	• Sample security was managed by the CXO. After preparation in the field samples were packed into polyweave bags and transported by the Company directly to the assay laboratory. The assay laboratory audits the samples on arrival and reports any discrepancies back to the Company. No such discrepancies occurred.
Audits or reviews	•	The results of any audits or reviews of sampling techniques and data.	• The only audits or reviews of the data associated with this drilling occurred as part of this MRE.



# Section 2 Reporting of Exploration Results

# (Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>Drilling took place on EL29698 and EL30015, which are 100% owned by CXO.</li> <li>EL30015 was previous owned by LTR, and in September 2017 was purchased by CXO via a sale agreement (ASX Release 14 Sept 2017).</li> <li>The area being drilled comprises Vacant Crown land.</li> <li>There are no registered heritage sites covering the areas being drilled.</li> <li>The tenements are in good standing with the NT DPIR Titles Division.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>The history of mining in the Bynoe area dates back to 1886 when tin was discovered by Mr. C Clark.</li> <li>By 1890 the Leviathan Mine and the Annie Mine were discovered and worked discontinuously until 1902.</li> <li>In 1903 the Hang Gong Wheel of Fortune was found, and 109 tons of tin concentrates were produced in 1905. In 1906, the mine produced 80 tons of concentrates.</li> <li>By 1909 activity was limited to Leviathan and Bells Mona mines in the area with little activity in the period 1907 to 1909.</li> <li>The records of production for many mines are not complete, and in numerous cases changes have been made to the names of the mines and prospects which tend to confuse the records still further. In many cases the published names of mines cannot be linked to field occurrences.</li> <li>In the early 1980s the Bynoe Pegmatite field was reactivated during a period of high tantalum prices by Greenbushes Tin which owned and operated the Greenbushes Tin and Tantalite (and later spodumene) Mine in WA. Greenbushes Tin Ltd entered into a JV named the Bynoe Joint Venture with Barbara Mining Corporation, a subsidiary of Bayer AG of Germany.</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>Greenex (the exploration arm of Greenbushes Tin Ltd) explored the Bynoe pegmatite field between 1980 and 1990 and produced tin and tantalite from its Observation Hill Treatment Plant between 1986 and 1988.</li> <li>They then tributed the project out to a company named Fieldcorp Pty Ltd who operated it between 1991 and 1995.</li> <li>In 1996, Julia Corp drilled RC holes into representative pegmatites in the field, but like all of their predecessors, did not assay for Li.</li> <li>Since 1996 the field has been defunct until recently when exploration has begun on ascertaining the lithium prospectivity of the Bynoe pegmatites.</li> <li>The NT geological Survey undertook a regional appraisal of the field, which was published in 2004 (NTGS Report 16, Frater 2004).</li> <li>LTR drilled the first deep RC holes at Lees, Booths, Carlton and BP33 in 2016, targeting surface workings dating back to the 1980s. The operators at that time were seeking Tin and Tantalum.</li> <li>CXO drilled at BP33 in 2016 and subsequently drilled at Lees, Booths and Carlton in 2018 after acquisition of the LTR project area.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>The tenement covers the northern portion of a swarm of complex zoned rare element pegmatite field, which comprises the 55km long by 10km wide West Arm – Mt Finniss pegmatite belt (Bynoe Pegmatite Field; NTGS Report 16). The main pegmatites in this belt include Mt Finniss, Grants, BP33, Hang Gong and Sandras</li> <li>The Finniss pegmatites have intruded early Proterozoic shales, siltstones and schists of the Burrell Creek Formation which lies on the northwest margin of the Pine Creek Geosyncline. To the south and west are the granitoid plutons and pegmatitic granite stocks of the Litchfield Complex. The source of the fluids that have formed the intruding pegmatites is generally accepted as being the Two Sisters Granite to the west of the belt, and which probably underlies the entire area at depths of 5-10 km.</li> <li>Lithium mineralisation has been identified historically as occurring at Bilato's (Picketts) and Saffums 1 (both amblygonite) but more recently LTR and CXO have identified spodumene at numerous other prospects, including Grants, BP33, Carlton, Booths, Lees, Hang Gong,</li> </ul>



Criteria	JORC Code explanation	Commentary									
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this</li> </ul>	<ul> <li>The de annour</li> </ul>	, Far West Cent tails of the drill neements as ou hat were drilled 0-Nov-18 31-Jan-19 27-Mar-1 15-Oct-19	holes used tlined in th d subseque ASX R Over 8 Quarte 2018 9 Wide, 9 High-g	for the ne body ent to t <b>Seport n</b> 50% inc erly Act High-gr	/ of this an his and we ame rease in BF ivities Repo rade interse tersections	nounceme ere also use 233 Lithium F rt for three n ections at BP at BP33 to i	nt and d in th Resour nonths '33 ahe ncreas	in the tal e MREs a ce to boos ended 31 ad of DFS e Ore Res	t DFS Decembre	w. ated
	exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	Carlton Carlton Carlton	16-Jan-20 12-Mar-1 9-Oct-19 23-Jan-20	9 Upgra Nume	de of M rous Hi	lineral Reso gh-Grade S	Lithium Inter ource at Carl podumene I Intersections	ton gro Drill Inte	ws Finniss ersections	Resour	
		Hang Gor Hang Gor Lees/Boot	9 31-Jan-19 g 28-Feb-19 g 9-Oct-19	<ul><li>Finnis</li><li>Drill re</li><li>Nume</li></ul>	s Miner esults to rous Hig	al Resource underpin a gh-Grade S	e grows to 8. dditional Re podumene I dditional Re	.6Mt wi source Drill Inte	th Hang G s at Finnis ersections	s at Finnis	S
		Lees/Boot Hole No.	hs 6-May-19 Prospect	Tenement	Resour Hole type	ce for Lees Easting	Drives Finni Northing	RL (m)	Azimuth (°)	Dip (°)	Depth (m)
		NRC132 NRC133	Hang Gong Hang Gong NW	EL30015 EL30015	RC RC	693995 694597	8598405 8598861	15.7 16.9	262.8 222.8	-75.84 -79.82	204.0 210.0



Criteria	JORC Code explanation	Comr	mentary								
		NRC134	Hang Gong NW	EL30015	RC	694534	8598889	17.1	235.71	-81.44	216.0
		NRC135	Hang Gong	EL30015	RC	694897	8598635	18	239.62	-75.89	198.0
		NRC136	Hang Gong	EL30015	RC	694800	8598998	16.8	208.45	-75.42	198.0
		NRC139	Lees	EL30015	RC	694505.4	8596203.1	26.6	232.3	-76.33	198.0
		NRC140	Lees	EL30015	RC	694401.2	8596004	22.2	230.7	-76.02	198.0
		NRC141	Booths	EL30015	RC	695135.3	8595469.6	36.4	210.00	-81	215.0
		NRC142	Booths	EL30015	RC	695011.8	8595594	32.7	206.69	-77.26	210.0
		NRC143	Booths	EL30015	RC	695185.3	8595232.7	36.3	222.00	-69.54	150.0
		NRC144	Booths	EL30015	RC	695231.3	8595323	41.3	221.40	-78.31	222.0
		NRC145	Booths	EL30015	RC	695192.8	8595402.1	39	211.48	-69.6	222.0
		NRC146	Booths	EL30015	RC	695275	8595188	36.3	220.06	-65.38	210.0
		FRC218	Grants	EL29698	RC	693162.2	8599039.3	18.4	268.3	-64.99	264.0
		FRC219	Grants	EL29698	RC	693132.7	8598978.5	19.4	262.4	-65.38	234.0
		FRC220	Grants	EL29698	RC	693154	8598964.5	18.8	263.11	-67.06	336.0
		FRC221	Grants	EL29698	RC	692861	8598841.2	22.9	87.38	-67.02	276.0
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	m assa rock (p • 0.4% L with al (intern	mple compositin ys. Length weig egmatite) is cor 20 was used as lowance for incl al dilution). tal equivalent va	hted averanstant. Iower cut Iuding up t	ages ar off gra to 3m c	e acceptab des for con of consecu	ne method mpositing a tive drill ma	becau and rep	se the de	nsity of tersectio	the



Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul> <li>The majority of holes have been drilled at angles of between 60 - 90° and approximately perpendicular to the strike of the pegmatites.</li> <li>The Carlton and BP33 pegmatites are steep dipping and as such mineralised intersection true widths are variable but approximately 50-70% of the down hole length.</li> <li>The Booths/Lees and Hang Gong pegmatites are stacked and shallowly (10-45°) dipping to the NE. Holes in this situation can be drilled steeper, sometimes vertically. They are generally planned to intersect orthogonally. Reviewing cross-sections, mineralised intersection true widths are variable but approximately 80-100% of the down hole length.</li> </ul>
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	• Refer to Figures and Tables in the release.
Balanced reporting	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	All exploration results have been reported.
Other substantive exploration data	• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	All meaningful and material data has been reported.
Further work	• The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	<ul> <li>CXO will undertake metallurgical testwork of half core from Carlton.</li> <li>Follow up drilling during 2020 is being considered to expand and infill the various resources. As outlined in the body of this announcement, there is scope to increase</li> </ul>



Criteria	JORC Code explanation	Commentary
	• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	<ul> <li>resources down-plunge at all deposits. There is also scope to infill drill to improve the resource category above Inferred or Indicated.</li> <li>BP33 and Carlton form part of an on-going update of the DFS for the broader Grants Project. This includes the utilisation of underground methods.</li> </ul>



# Section 3 Estimation and Reporting of Mineral Resources

# (Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul> <li>A data check of source assay data and survey data has been undertaken and compared to the database. No translation issues have been identified. The data was validated during the interpretation of the mineralisation, with no significant errors identified. Only RC and DDH holes have been included in the MRE.</li> <li>Data validation processes are in place and run upon import into Micromine to be used for the MRE. Checks included: missing intervals, overlapping intervals and any depth errors.</li> <li>A DEM topography to DGPS collar check has been completed.</li> </ul>
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	• Graeme McDonald (CP) has undertaken several site visits while drilling activities have been underway between November 2017 and November 2019. A review of the drilling, logging, sampling and QAQC procedures has been undertaken. All processes and procedures were in line with industry best practice.
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>The geological interpretations are considered robust due to the nature of the relationships between the geology and mineralisation. The mineralisation is hosted within the pegmatites. The locations of the hangingwall and footwall of the pegmatite intrusions are well understood with drilling which penetrates both contacts.</li> <li>Diamond drill core and reverse circulation drill holes have been used in the MRE where available for each deposit. Lithology, structure, alteration and mineralisation data has been used to generate the mineralisation models. The primary assumption is that the mineralisation is hosted within structurally controlled pegmatite, which is considered robust. Additional surface exposure within the historic pits at some deposits helps to constrain the pegmatite contacts. Older BEC series RC drill holes were not considered at all as they were often shallow and were not assayed for Li.</li> <li>Due to the relatively close spaced nature of the drilling data and the geological continuity conveyed by the datasets, no alternative interpretations have been considered.</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>The mineralisation interpretations are based on a lithium cut-off grade of 0.3% Li<sub>2</sub>O, hosted within the pegmatites.</li> <li>At BP33 and Carlton a dominant sub-vertical host pegmatite is considered to be continuous over the length of the deposit. The pegmatites pinch and swell along their length. At both deposits a number of smaller pegmatite bodies were also identified and modelled. In some instance these are mineralised and contribute to the MRE.</li> <li>The Carlton pegmatite has small zones of internal low-grade material comprising predominantly Burrell Creek Formation sediments mixed with narrow pegmatite bodies. High-grade and low-grade mineralised domains were identified and estimated independently using a hard boundary.</li> <li>At Hang Gong and Booths/Lees, the mineralisation is hosted within a series of shallow to gently dipping stacked pegmatite bodies. These bodies strike in a NW direction, are variably mineralised with thicknesses from 1 to +10m.</li> <li>Generally, the pegmatites display a non-mineralised wall rock phase of 1-2m thickness and some internal quartz rich zones.</li> </ul>
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	<ul> <li>BP33</li> <li>The lithium is hosted within a 220m long section of mineralised pegmatite which strikes NE and averages 20-30m in true width.</li> <li>The pegmatite is sub-vertical to steeply east dipping and has been intersected to depths of approximately 390m below surface.</li> <li>Whilst continuous, the pegmatite body does appear to narrow to the north but remains open to the south, although it does appear to become less continuous. The pegmatite is deeply weathered to depths of approximately 50m below surface.</li> <li>Carlton</li> <li>The lithium is hosted within a 350m long section of mineralised pegmatite which strikes NE and averages 10-15m in true width.</li> <li>The pegmatite is steeply east dipping and has been interpreted at a depth of approximately 430m below surface.</li> <li>Whilst continuous, the pegmatite body does appear to narrow to the north but remains open to the south and down plunge. The pegmatite is deeply weathered to depths of approximately 60m below surface.</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>Hang Gong</li> <li>The lithium is hosted within a series of 11 dominant stacked pegmatite bodies that cover an area of approximately 400m (NW) by 800m (NE) in plan view. With true width of individual bodies varying between 1 and 20m.</li> <li>The pegmatites are shallow to gently dipping to the NE and have been interpreted at a depth of approximately 200m below surface.</li> <li>The pegmatite bodies appear to pinch and swell and have a limited strike extent but remain open down dip. The pegmatites are deeply weathered to depths of approximately 70m below surface.</li> <li>Booths/Lees</li> <li>The lithium is hosted within a series of 7 dominant stacked pegmatite bodies with a NW strike extent of approximately 750m. With true width of individual bodies varying between 1 and 13m.</li> <li>The pegmatites dip between 30-45 degrees to the NE and have been interpreted at a depth of approximately 200m below surface.</li> <li>Whilst continuous, the pegmatite bodies do not appear to connect with the bodies present at the nearby Lees Deposit to the NW and display a different orientation. They also appear to pinch out to the SW but do however remain open down dip. The pegmatites are deeply weathered to depths of approximately 200m below surface.</li> </ul>
Estimation and modelling techniques	<ul> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> </ul>	<ul> <li>Grade estimation of lithium has been completed using Ordinary Kriging (OK) into mineralised and unmineralized pegmatite domains using Micromine software. Variography has been undertaken on the grade domain composite data. Variogram orientations are largely controlled by the strike and dip of the mineralisation. Grade domains have been estimated using hard boundaries.</li> <li>At Hang Gong and Booths/Lees where multiple mineralised pegmatite bodies are present, low sample numbers within some pegmatites resulted in using weightings in those domains that were derived from the dominant domain.</li> <li>This represents the maiden MRE for the Booths/Lees deposit. For the other deposits the updated MRE compares favourably with previous estimates and takes into account extra drilling that has been undertaken. A check estimate using an alternative estimation technique (ID2) has also been undertaken for all deposits and compares favourably.</li> </ul>



## Criteria JORC Code explanation

- The assumptions made regarding recovery of byproducts.
- Estimation of deleterious elements or other nongrade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).
- In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.
- Any assumptions behind modelling of selective mining units.
- Any assumptions about correlation between variables.
- Description of how the geological interpretation was used to control the resource estimates.
- Discussion of basis for using or not using grade cutting or capping.
- The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.

## Commentary

- No assumptions have been made regarding recovery of any by-products.
- Fe is considered to be a deleterious element. However, it is known that Fe contamination exists in the assayed samples due to the use of steel drill rods, bits and steel milling equipment. By comparing RC and DD assays as well as data from blanks and check assays undertaken at an independent umpire laboratory using non-steel-based tungsten carbide mills, the level of contamination was shown to be both substantial and highly variable and difficult to correct. For this reason, Fe has not been estimated as it is known that the raw data is contaminated and will therefore result in an estimate that is misleading. No other deleterious elements have been considered and therefore estimated for this deposit.
- The data spacing varies considerably within the deposit ranging from surface drill holes at an approximate spacing of 25 m by 30 m, to deep exploration drill holes at spacings greater than 100 m by 30 m. A parent block size of 5 m (X) by 10 m (Y) by 10 m (Z) with a sub-block size of 1.25 m (X) by 2.5 m (Y) by 2.5 m (Z) has been used to define the mineralisation, with the lithium estimated at the parent block scale.
  - Pass 1 estimation has been undertaken using a minimum of 4 and a maximum of 24 samples into a search ellipse with a radius of 50m, with samples from a minimum of two drill holes. Approximately 46% of blocks were estimated during this run.
  - Pass 2 estimation has been undertaken using a minimum of 4 and a maximum of 24 samples into a search ellipse with a radius of 120m, with samples from a minimum of two drill holes. Approximately 39% of blocks were estimated during this run
  - Pass 3 estimation has been undertaken using a minimum of 4 and a maximum of 24 samples into a search ellipse with a radius of 240m, with samples from a minimum of two drill holes. Approximately 14% of blocks were estimated during this run
  - Pass 4 estimation has been undertaken to populate any remaining blocks, particularly at depth. All criteria remained the same as for pass 3 but with a minimum of one drill hole. Only 1% of the blocks were estimated during this run.

### Carlton

• The data spacing varies within the deposit but with a nominal drill hole spacing of 40 m by 30 m. A parent block size of 5 m (X) by 16 m (Y) by 10 m (Z) with a sub-block size of 1.5 m (X) by 4 m (Y) by 2.5 m (Z) has been used to define the mineralisation, with the lithium estimated



Criteria	JORC Code explanation	Commentary
		<ul> <li>at the parent block scale.</li> <li>Pass 1 estimation has been undertaken using a minimum of 4 and a maximum of 24 samples into a search ellipse with a radius of 50m, with samples from a minimum of two drill holes. Approximately 46% of blocks were estimated during this run.</li> <li>Pass 2 estimation has been undertaken using a minimum of 4 and a maximum of 24 samples into a search ellipse with a radius of 120m, with samples from a minimum of two drill holes. Approximately 48% of blocks were estimated during this run.</li> <li>Pass 3 estimation has been undertaken using a minimum of 4 and a maximum of 24 samples into a search ellipse with a radius of 300m, with samples from a minimum of two drill holes. Approximately 2% of blocks were estimated during this run.</li> </ul>
		Hang Gong
		<ul> <li>The data spacing varies considerably within the deposit ranging from surface drill holes at an approximate spacing of 60 m by 70 m, to marginal exploration drill holes at a much broader spacing. A parent block size of 20 m (X) by 20 m (Y) by 5 m (Z) with a sub-block size of 4 m (X) by 4 m (Y) by 1 m (Z) has been used to define the mineralisation, with the lithium estimated at the parent block scale.</li> <li>Pass 1 estimation has been undertaken using a minimum of 4 and a maximum of 28 samples into a search ellipse with a radius of 90m, with samples from a minimum of two drill holes. Approximately 59% of blocks were estimated during this run.</li> <li>Pass 2 estimation has been undertaken using a minimum of 4 and a maximum of 28 samples into a search ellipse with a radius of 180m, with samples from a minimum of two drill holes. Approximately 38% of blocks were estimated during this run</li> <li>Pass 3 estimation has been undertaken using a minimum of 4 and a maximum of 28 samples into a search ellipse with a radius of 300m, with samples from a minimum of two drill holes. Approximately 38% of blocks were estimated during this run</li> </ul>
		<ul> <li>Booths/Lees</li> <li>The data spacing is relatively consistent within the deposit with surface drill holes at an approximate spacing of 80 m by 60 m. At the SW end drilling is a little closer together. A parent block size of 30 m (X) by 30 m (Y) by 5 m (Z) with a sub-block size of 6 m (X) by 6 m (Y) by 1 m (Z) has been used to define the mineralisation, with the lithium estimated at the parent block scale.</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>Pass 1 estimation has been undertaken using a minimum of 4 and a maximum of 28 samples into a search ellipse with a radius of 90m, with samples from a minimum of two drill holes. Approximately 25% of blocks were estimated during this run.</li> <li>Pass 2 estimation has been undertaken using a minimum of 4 and a maximum of 28 samples into a search ellipse with a radius of 180m, with samples from a minimum of two drill holes. Approximately 49% of blocks were estimated during this run</li> <li>Pass 3 estimation has been undertaken using a minimum of 4 and a maximum of 28 samples into a search ellipse with a radius of 300m, with samples from a minimum of two drill holes. Approximately 17% of blocks were estimated during this run</li> <li>Pass 4 estimation has been undertaken to populate any remaining blocks, particularly at depth. All criteria remained the same as for pass 3 but with a minimum of one drill hole. Only 9% of the blocks were estimated during this run.</li> <li>No selective mining units are assumed in the estimates.</li> <li>Lithium only has been estimated within the lithium mineralised domains and non-mineralised waste pegmatite domains. No correlation between variables has been assumed.</li> <li>The mineralisation and geological wireframes have been used to flag the drill hole intercepts in the drill hole assay files. The flagged intercepts have then been used to create composites in Micromine. The composite length is 1 m in all data for all deposits.</li> <li>The influence of extreme sample distribution outliers in the composited data has been determined using a combination of histograms and log probability plots. It was decided that no top-cuts need to be applied.</li> <li>Model validation has been carried out, including visual comparison between composites and estimated blocks; check for negative or absent grades; statistical comparison against the input drill hole data and graphical plots.</li> </ul>
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	The tonnes have been estimated on a dry basis.
Cut-off parameters	<ul> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul> <li>For the reporting of the BP33 and Carlton Mineral Resource Estimates, a 0.75 Li<sub>2</sub>O% cut-off has been used after consultation with Core Exploration.</li> <li>This is higher than similar deposits elsewhere within Australia and is based on current</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>economic modelling of the deposit as an underground mining development together with maintaining a high average grade.</li> <li>For the reporting of the Hang Gong and Booths/Lees Mineral Resource Estimates, a 0.70 Li<sub>2</sub>O% cut-off has been used after consultation with Core Exploration.</li> <li>This is slightly lower than other deposits in the region and has been used to maintain continuity within the block models but without compromising the overall average grade.</li> </ul>
Mining factors or assumptions	<ul> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<ul> <li>Due to the depth extent and size as well as the grade and continuity of mineralisation, it is considered that underground mining methods will be used at BP33 and Carlton. Given the close proximity of the Hang Gong deposit to Carlton, underground mining methods will also be considered here.</li> <li>The BP33, Carlton and Hang Gong deposits will be considered as part of the further Feasibility Studies that are currently underway for the broader Finniss Project.</li> <li>Given that this represents the maiden MRE for the Booths/Lees deposit, no consideration has been given to potential mining methods and this will require further evaluation.</li> <li>It is assumed that the material mined from all deposits will be processed at the proposed Grants processing facility nearby.</li> <li>No other assumptions have been made.</li> </ul>
Metallurgical factors or assumptions	<ul> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical</li> </ul>	<ul> <li>No metallurgical recoveries have been applied. Although a significant amount of metallurgical test work has been undertaken across the whole project and at BP33 that demonstrates that a suitable spodumene concentrate can be produced.</li> <li>Metallurgical test work is ongoing.</li> </ul>



Criteria	JORC Code explanation	Commentary
	assumptions made.	
Environmental factors or assumptions	<ul> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	<ul> <li>No environmental assumptions have been made during the MRE.</li> <li>Mine Management Plan (MMP) for the Finniss Lithium Project has been approved by the Northern Territory Government.</li> </ul>
Bulk density	<ul> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul> <li>Water immersion and pychnometer density determinations have been undertaken on 494 samples from 9 diamond core drill holes spread across the BP33 deposit. Analysis of this data was used in the determination of the fresh pegmatite density for assignment in the Mineral Resource estimate. A bulk density value of 2.73 g/cm<sup>3</sup> has been applied to the fresh pegmatite and has been coded into the model.</li> <li>A total of 165 fresh diamond drill core samples from 4 DD holes from the Carlton deposit have been analysed for specific gravity. The average density values were very similar to those determined at the nearby Grants and BP33 deposits and is consistent with expected values. A value of 2.71 g/cm<sup>3</sup> was used for all fresh mineralised pegmatite.</li> <li>A total of 105 fresh diamond drill core samples from the Hang Gong deposit were collected and analysed for specific gravity. The average density values were very similar to those determined at the nearby Carlton, Grants and BP33 deposits and is consistent with expected values. A value of 2.71 g/cm<sup>3</sup> was used for all fresh mineralised pegmatite.</li> <li>There have been no direct density measurements of any drill samples at the Booths-Lees deposit. Density values were based on those determined at nearby deposits. A value of 2.71</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>g/cm3 was used for all fresh pegmatite.</li> <li>Within all of the deposits, the block model density has been assigned based on lithology and oxidation state. In general, a weak correlation exists between density and Li<sub>2</sub>O grade. Slightly lower densities are observed at deposits with lower average Li<sub>2</sub>O grades.</li> </ul>
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>The resource classification has been applied to the MR estimates based on the drilling data spacing, grade and geological continuity, and data integrity.</li> <li>The classifications take into account the relative contributions of geological and data quality and confidence, as well as grade confidence and continuity.</li> <li>Confidence in the Measured and Indicated mineral resource is sufficient to allow application of modifying factors within a technical and economic study.</li> <li>For the Carlton deposit, at the southern end and deepest parts of the mineralisation, the resource has been extrapolated approximately 100m beyond the limits of the data. This extrapolation has occurred down dip/plunge and is based on the confidence in the geological and grade continuity in this direction. The result is that approximately 50% of the inferred mineral resource is based on this extrapolated data.</li> <li>The classification at each of the deposits reflects the view of the Competent Person.</li> </ul>
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	<ul> <li>This Mineral Resource estimates for BP33 and Carlton have been subjected to an Independent Mineral Resource and Model Review and Assessment by an external party.</li> <li>No material issues were found that would impact the global tonnes and grade estimated at the deposits.</li> <li>The Hang Gong and Booths /Lees deposits have not been audited or reviewed by an external party.</li> </ul>
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to	<ul> <li>The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code.</li> <li>The statement relates to global estimates of tonnes and grade.</li> <li>No production records have been supplied as part of the scope of works, so no comparison or reconciliation has been made. Historically, only a small amount of tin/tantalum has been</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul> <li>quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	produced from weathered pegmatite from shallow pits by Greenbushes in the 1980's. This is well above the top of fresh rock reported in the current mineral resource estimate.



# Section 4 Estimation and Reporting of Ore Reserves Grants (Open Pit), BP33 (Underground) & Carlton (Underground)

## (Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	<ul> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	<ul> <li>This PFS and the Underground Ore Reserve Estimate contained within it is based upon the Grants and BP33 Mineral Resource Estimates released to the ASX on the 15<sup>th</sup> June 2020, by Core Exploration, competent persons: Mr. Graeme McDonald (Consulting Geologist to Core Lithium Limited) &amp; Mr Bernard Peters (Technical Director – Mining OreWin Pty Ltd). The Minerals Resources are reported inclusive of the Ore Reserves. Mr. Peters has relied on the integrity and accuracy of the Mineral Resource for this Ore Reserve estimate.</li> </ul>
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	• The Competent Person (Mr Blair Duncan MAUSIMM, 203396) is currently the Chief Operating Officer for Core Lithium and has visited the site on numerous occasions. Whilst preparing this estimate the Competent Person has satisfied himself that the data and analysis used in this estimate is appropriate for the proposed operating conditions for the project. The Competent Persons for Ore Reserves (Mr Bernard Peters FAusIMM, 201743) completed a site visit of the BP33 and Carlton sites on 7 November 2019.
Study status	<ul> <li>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</li> <li>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves.</li> </ul>	• This Open Pit Ore Reserve estimate has been produced during the April 2019 Definitive Feasibility Study (DFS).The Ore Reserve considered only the Measured and Indicated Resources published as part of the Mineral Resource estimated announced



	Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	<ul> <li>for Grants and BP33 deposits on the 22<sup>nd</sup> October and 6<sup>th</sup> November 2018 respectively.</li> <li>It should be noted that there is an additional 14% contained metal as Inferred resources within the Ore Reserve pit designs which has been assigned zero revenue for the purposes of this Ore Reserve estimate.</li> <li>The Underground Ore Reserve is based upon a PFS study, Ore Reserves used only Measured and Indicated Mineral Resources for the BP33 and Carlton Mineral Resources.</li> <li>The project is considered technically achievable and economically viable. The resulting mine plan considered material Modifying Factors such as dilution and ore loss, various project boundary constraints, processing recoveries and all costs associated with mining, processing, transporting and selling the product to be produced by the operation.</li> </ul>
Cut-off parameters	• The basis of the cut-off grade(s) or quality parameters applied.	<ul> <li>The Mineral Resource provided was a geologically domained resource; this geological model was modified for ore loss and dilution and evaluated to determine which blocks produced cash surplus when treated as ore. The Ore Reserve was estimated using a 0.75% Li<sub>2</sub>O cutoff. The cut-off grade contemplates all pre-tax costs associated with the processing and selling of a Li<sub>2</sub>O concentrate product. The following costs:         <ul> <li>Incremental ore haulage to the process plant RoM</li> <li>Stockpile re-handle</li> <li>Processing</li> <li>Road transport</li> <li>Ship loading</li> <li>Royalties</li> <li>General overhead cost and administration</li> </ul> </li> <li>are all easily paid for by the 0.75% Li<sub>2</sub>O cutoff. The revenue was determined using an average price for Li<sub>2</sub>O concentrate of</li> </ul>



		<ul> <li>US\$744 per tonne and an exchange rate of US\$0.65 per AU\$1.00. Process recoveries were applied as outlined below under "Metallurgical Factors or Assumptions".</li> <li>The breakeven cut-off for underground mining at Carlton and BP33 is A\$72.97/t NSR. A marginal cut-off grade of A\$75/t NSR or 0.61% Li<sub>2</sub>O has been selected to form the basis of the more detailed underground design.</li> </ul>
Mining factors or assumptions	<ul> <li>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</li> <li>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</li> <li>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</li> <li>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</li> <li>The mining dilution factors used.</li> <li>Any minimum mining widths used.</li> <li>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</li> <li>The infrastructure requirements of the selected mining methods.</li> </ul>	<ul> <li>Pit optimisations &amp; sensitivity analysis were completed using Whittle software to produce a range of pit shells using recommended slope design criteria, mining dilution, ore loss and processing recoveries together with mining, processing, transport and sales cost estimates, and revenue projections to form the basis for detailed pit designs and subsequent mining and processing schedules.</li> <li>A conventional open pit mine method was chosen as the basis of the DFS. Ore occurs approximately 50m below surface meaning pre-stripping is required. Pre-stripping has been allowed for. Selective mining methods of the ore zone have been assumed with a Smallest Mining Unit (SMU) size of 5m x 5m x 2.5m (XYZ) applied to the resource block model regularisation process to produce a diluted mining model. This SMU size was selected as the most appropriate block size considering the mining fleet and mining methods proposed by the preferred Mining Contractor Tender submission. Selective ore mining will also be supported by machine guidance systems, production blasthole grade control processes, and the highly visual nature of ore in comparison to the waste material.</li> <li>Pit slope design criteria is based on a DFS geotechnical study completed by SRK consultants in September 2018. Design sectors are based on the weathered, transitional and fresh rock</li> </ul>



zones as they occur vertically through the mining sequence. The slope design criteria selected for pit designs is based on a non-depressurised slope.

- The mine schedule is based on a processing plant nameplate capacity of 1.0Mtpa (dry) and the mining excavator fleet proposed by the preferred Mining Contractor that has an average annual mining capacity of 16 Mtpa (dry) over the mine life. Grants will be mined in two stages with an initial pit followed by a final cutback, with BP33 mined in one stage. The diluted mining model has been used to develop the equipment based mine schedule and assumes effective operation of the mining fleet and is based on realistic utilisation estimates.
- Ore loss and Dilution factors are based on the diluted resource block models developed from the regularisation process. Global ore loss and dilution results for both pits are:

Grants Resource	Ore (dry tonnes)	Li₂O %	% Ore Tonnage
Undiluted	2,884,603	1.48	-
Ore Loss (OL)	268,133	1.30	9.3%
Dilution (D)	160,390	0.09	5.6%
Diluted (Undil - OL + D)	2,776,860	1.42	-3.7%

- Ramp widths for pit designs vary from 19m for single to 26m for double lane at a maximum operating gradient of 10%.
- Minimum mining widths for the pit design are 40m with tight digging areas and "good-bye" cuts at the base of the pit a



minimum of 20m.

- Inferred Mineral Resource for the purpose of the Ore Reserve estimate is treated as waste which has been economically carried by the Ore. In addition, Inferred Resources were included in several pit optimisation runs to ensure infrastructure and waste dumps were not located on potential future economic resource.
- Mining Infrastructure required to support the mine plan includes waste rock dumps, ROM pad, haul roads, crusher and processing plant, tailings storage facility, explosives storage facility, water storage, workshops and other buildings required for a contract mining operation.
- The mining method selected for the Carlton deposit is sublevel open stope mining. Access to the Carlton underground deposit is via a portal in the planned Grants open pit and a 1,200 m decline. The 6.0 m x 6.0 m decline will also act as the primary ventilation intake into the mine with the exhaust to surface via a return a raise bored return air raise (RAR). Internal pillars are utilised for overall stability. The narrow (5 to 15 m) ore body width, vertical orientation, and competent host rock ground conditions and internal rock pillars allows for sublevel open stoping mining without back fill to be utilised as a viable low-cost mining method.

The mining method selected for the BP33 deposit is sublevel open stope mining. Access to the BP33 underground deposit is via a ~400 m decline from the surface box-cut to a ramp system connecting the levels to an estimated depth of ~320 m below surface. The BP33 exhaust is via a dedicated raise bored RAR to surface. Internal pillars are utilised for overall stability. The narrow (5 to 25 m) ore body width, vertical orientation, and



		competent host rock ground conditions and internal rock pillars allows for sublevel open stoping mining without back fill to be utilised as a viable low-cost mining method. BP33 and Carlton Assumptions: • Stoping Recoveries – 95 % • Dilution – 10 % • Shape Height (Sub level) – 30 m. • Minimum Width (Across Strike) – 5 m. • Maximum Width (Across Strike) – 30 m.
Metallurgical factors or assumptions	<ul> <li>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</li> <li>Whether the metallurgical process is well-tested technology or novel in nature.</li> <li>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</li> <li>Any assumptions or allowances made for deleterious elements.</li> <li>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</li> <li>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</li> </ul>	<ul> <li>For Lithium ore the DFS (ASX: 17 April 2019) &amp; PFS (This announcement) economics considered processing comprising dense media gravity separation (DMS) of the 0.5mm to 6.3mm fraction after P100 crushing to 6.3mm. This process is considered lowest risk methodology for the ore type comprising zoned, very coarse grained, spodumene-α pegmatite. The rejects will be stockpiled for possible future use, but nil revenue was attributed to them. The minus 0.5mm fines are to be placed in a purpose built tailings storage facility (TSF) but essentially thrown away. Four generations of metallurgical test work was used to arrive at the final process flowsheet &amp; the competent person visited comparable operations in WA to satisfy himself that the flowsheet of a full scale plant is applicable. The introduction of a re-crush facility on DMS middlings was key to consistently producing grades of 5.5% or better at acceptable recoveries of over 70%. This necessitated a primary and secondary DMS circuit on the coarser +2mm fraction, so that the secondary coarse DMS floats could be re-crushed and recycled.</li> <li>Separating the -2mm +0.5mm fines and incorporating a separate fines DMS circuit was considered to be necessary to ensure the</li> </ul>



			plant design was sufficiently robust to cater for any unexpected variability in the ore body.
Environmental	•	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	<ul> <li>The Grants Lithium Project has been assessed under the Environmental Assessment Act 1982 (EA Act) via an Environmental Impact Statement. The Grants Lithium Project has also achieved Mining Management Plan approval. Authorisation number 1021-01.</li> <li>A Notice of Intent for BP33 is currently being assessed under the new Environment Protection Act (EP Act).</li> <li>A Mineral Lease over the BP33 area is currently under application</li> <li>A variation to the Grants EIA is being assessed under the current EA Act to process the ore mined at BP33 &amp; Carlton.</li> <li>The Carlton prospect is situated on the granted Grants Mineral Lease.</li> <li>Core believes that there are no reasons why these approvals will not be achieved in the time frames to meet their development time lines.</li> </ul>
Infrastructure	•	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	<ul> <li>Sufficient land exists to locate all proposed infrastructure, tailings storage facilities (TSF) and waste rock dumps required for the project.</li> <li>Product export will be via Darwin Port facilities, 88 km by road &amp; an entirely sealed road. A formal application for Access has been made. Darwin Port is now conducting a Feasibility Study on the projects access requirements.</li> <li>Power will be generated on site to meet the needs of the crushing plant, process plant and supporting infrastructure.</li> <li>A water balance assessment has determined the water resources from the existing Observation Hill dam will need to be</li> </ul>



		<ul> <li>augmented by a second dam to the east of the project &amp; both of these dams will be sufficient to meet the needs of the operation. An ancillary Mineral Lease over the Observation Hill dam area is under application.</li> <li>The workforce required for the operation will be engaged on a residential basis.</li> </ul>
Costs	<ul> <li>The derivation of, or assumptions made, regarding projected capital costs in the study.</li> <li>The methodology used to estimate operating costs.</li> <li>Allowances made for the content of deleterious elements.</li> <li>The source of exchange rates used in the study.</li> <li>Derivation of transportation charges.</li> <li>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</li> <li>The allowances made for royalties payable, both Government and private.</li> </ul>	<ul> <li>Open Pit</li> <li>Capital costs: Capital estimates are based on the current forecast project capital costs of A\$76.5 million (inclusive of contingency and pre-production operating costs). Operating Costs: Mining costs are based on Mining Contractor tender submissions with a preferred contractor announced to the ASX on the 24<sup>th</sup> January 2019. Mining Costs also consider activities for mining team operating costs, management and maintenance, mobile plant maintenance infrastructure, ore rehandle and crusher feed, clear and grub, top soil management, and rehabilitation and mine closure criteria. The life of mine average mining cost was estimated to be \$9.90 per bcm of material mined. The processing costs was estimated to be \$20.36 per tonne of ore treated and based upon tender submissions for Crushing &amp; Screening and Operating &amp; Maintenance proposal from Primero Group for the DMS plant. General and Administration costs were prepared by Core Exploration and estimated to be \$4.32 per tonne of concentrate produced. Transport costs were derived from Qube Bulk who have been awarded preferred contractor status. The accepted tender rate is \$8.54/t of product.</li> </ul>



into the project.

- Total costs per tonne of concentrate produced are estimated to be A\$509 excluding pre-strip costs which are included in the capital cost noted above.
- All capital and operating costs have been estimated to a DFS level of confidence +/-15%

### <u>Underground</u>

• Mining costs were prepared by OreWin Pty Ltd. and derived from a quotation from a mining contractor, other suppliers, and current project costs. Mining costs were benchmarked against similar projects. Mining costs are to a PFS level. Costs have been calculated for a 1.0 Mtpa mining rate for BP33 and Carlton.

Underground Capital Costs:

- BP33 Underground Mining Capital costs: A\$44.99 M
- Carlton Underground Mining Capital costs: A\$52.24 M

Processing costs were prepared by Primero, Owners Costs and G&A costs were prepared by Core.

BP33 all in operating unit costs:

- o Underground Mining A\$74.66 /t Mined
- o Concentrate Production– A\$24.05 /t Mined
- o General Mine Administration A\$2.33 /t Mined
- Product Management A\$2.88 /t Mined



		<ul> <li>Carlton all in operating unit costs:</li> <li>Underground Mining – A\$70.68 /t Mined</li> <li>Concentrate Production– A\$21.40 /t Mined</li> <li>General Mine Administration – A\$2.11 /t Mined</li> <li>Product Management – A\$2.22 /t Mined</li> </ul>		
Revenue factors	<ul> <li>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</li> </ul>	Core Lithium commissioned Roskill to provide Li <sub>2</sub> O price forecasts. The commissioned forecasts provided forecast data well beyond the duration of the project in Real and Nominal terms for a 6.0% spodumene concentrate. A factor of 96.67% was used to derive the price for a 5.8% spodumene concentrate.		
		Revenue was calculated as the in-situ value after allowances have been made for:		
		<ul> <li>Recovery to concentrate.</li> <li>Concentrate transport.</li> <li>Taxes and Royalties.</li> <li>Lithium concentrate recovery is a constant 71.70% and occurs at all feed grades.</li> <li>Gross revenue assumes 100% of Spodumene 5.8% Payable.</li> </ul>		
Market assessment	<ul> <li>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</li> <li>A customer and competitor analysis along with the identification of likely market windows for the product.</li> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and</li> </ul>	<ul> <li>Core has entered into off take agreements for the sale of up to 30% of battery grade Li<sub>2</sub>O concentrate production. This cornerstone offtake agreement is with Sichuan Yahua Industrial Group Co Ltd (Yahua). The executed agreement was announced on the ASX on 1 April 2019. The Yahua agreement is for approximately 40% of annual concentrate production.</li> <li>Strong interest from China, Japan &amp; Korea continues to suggest</li> </ul>		



	acceptance requirements prior to a supply contract.	that t	here will	be no sales	s risk for	the Spodur	nene concentrate.		
Economic	<ul> <li>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> </ul>	conomic  Lerchs-Grossi has been con portion of the applied. Sens sensitive to d recovery, mir were complet the case of w				man analysis of the deposit, via Whittle software, aducted to focus development around the economic e deposit. Discounting interest rate of 8% was sitivities conducted indicate the project is most lirect revenue factors such as price, metallurgical ning cost, wall angles and processing cost. These eted using either +/- 20% from assumed values or in vall angle ± 5°. Net Present Value (NPV) for all examined for the project is positive.			
		Underground							
		The economic analysis used the PFS assumptions for BP33 and Carlton Underground mines. Sensitivities were prepared for spodumene price, exchange rates, processing costs, mining costs, and capital expenditure. Net Present Value (NPV) for all base case assumptions were positive.							
		PFS NPV ranges and sensitivity to variations in the significant assumptions and inputs are illustrated as follows as separate incremental outcomes.							
		NPV (8% Discount Rate)		it Rate)					
		AUD: USD	Units	0.60	0.65	0.70			
		BP33	A\$M	106.6	85.4	67.3			
		Carlton	A\$M	14.81	4.9	-3.6			



	NPV			
Discount Rate	Units	6%	8%	10%
BP33	A\$M	96.1	85.4	75.9
Carlton	A\$M	7.3	4.9	3.0

		NPV (8% Discount Rate)			
Costs	Units	-20%	0%	20%	
BP33	A\$M	132.0	85.4	39.8	
Carlton	A\$M	34.1	4.9	-23.7	

		NPV (8% Discount Rate)		
Revenue	Units	-20%	0%	20%
BP33	A\$M	27.6	85.4	136.2
Carlton	A\$M	-22.7	4.9	28.7

BP33 financial results are:

- Net Present Value (8% Discount Rate) A\$85.4 M (real)
- Undiscounted Cash Flow A\$136.M
- C1 Operating Costs A\$600 /DMS t.
- o IRR = 54.7%

Carlton financial results are:

- Net Present Value (8% Discount Rate) A\$4.9 M (real)
- Undiscounted Cash Flow A\$18.3 M
- C1 Operating Costs A\$722 /DMS t
- IRR = 14.2%



Social	• The status of agreements with key stakeholders and matters leading to social licence to operate.	Potential cumulative impacts to environmental and social values in the Cox Peninsula region and catchments of West Arm and Charlotte River were considered in the context of the existing and reasonably foreseeable future developments. These are being formally assessed in the BP33 NOI. Core is engaging with stakeholders as part of the NOI process.
		The Carlton prospect is located on the granted Grants Mineral Lease ML31726.
		Core Lithium has not identified or encountered any obstruction to gaining a social licence to operate.
		The mineral Lease was granted in January 2019 with no native title claims. The project was issued an Aboriginal Areas Protection Authority certificate on 29 Marth 2019.
Other	<ul> <li>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</li> <li>Any identified material naturally occurring risks.</li> </ul>	The project area is located on Vacant Crown Land, the underlying tenure EL29698 is owned 100% by Core. The mineral lease ML31726 is granted.
	<ul> <li>The status of material legal agreements and marketing arrangements.</li> <li>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</li> </ul>	The Darwin area is prone to cyclone activity throughout December, January, February, March, and April each year. Production estimates have considered the impact of such events.
		Risk analysis workshop was undertaken in January 2020. No naturally occurring material risks have been identified.



Classification	<ul> <li>The basis for the classification of the Ore Reserves into varying confidence categories.</li> </ul>	<u>(</u>
	• Whether the result appropriately reflects the Competent Person's view of the deposit.	•
	• The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	
		<u> </u>
		Prov
		and

### <u>Open Pit</u>

• Only Measured and Indicated Mineral Resource within the final pit designs were considered and were classified by application of the appropriate mining modifying factors to a Probable Ore Reserve in accordance with the JORC Code (2012). The Competent Person considers that, based on experience with projects of a similar nature, the Ore Reserve Estimate reflects a reasonable expectation of selective mining from a Spodumene pegmatite deposit.

### <u>Underground</u>

Proved and Probable Ore Reserves were estimated for the Finniss BP33 and Carlton deposits. Measured Mineral Resources were converted to Proved Ore Reserves and Indicated Mineral Resources were converted to Probable Ore Reserves with the application of modifying factors. No Probable Ore Reserves have been derived from Measured Mineral Resources.



		Mt	Li₂O (%)	Contained Li <sub>2</sub> O (kt)	
	Open Pit			I	
	Grants				
	Proved	1.0	1.4%	14.9	
	Probable	0.8	1.5%	11.6	
	Total	1.9	1.4%	26.5	
	Underground				
	BP33				
	Proved	1.3	1.4%	18.4	
	Probable	1.0	1.4%	13.2	
	Total	2.3	1.4%	31.5	
	Carlton				
	Proved	0.6	1.2%	7.1	
	Probable	1.0	1.0%	10.6	
	Total	1.6	1.1%	17.8	
	Total - Underground				
	Proved	1.9	1.3%	25.5	
	Probable	2.0	1.2%	23.8	
	Total	3.9	1.3%	49.3	
	Total – All Mining				
	Methods	2.0	1 40/	40.4	
	Proved Probable	2.9 2.8	1.4% 1.3%	40.4 35.4	
	Total	5.7	1.3% 1.3%	35.4 <b>75.8</b>	
Audits or • The results of any audits or reviews of Ore Reserve estin		5.7	1.5%	75.8	
, , , , , , , , , , , , , , , , , , ,					
reviews					
		Reserve estimate was completed to a level of accuracy			
		considered to be: +/-15%. There are no modifying factors			
	identified at	the time of this	statement that a	are not accounted	



for and that would have a material impact on the Ore Reserve estimate.

### Underground

• The PFS Ore Reserve was prepared by OreWin Pty Ltd who is independent of Core Lithium Ltd.

### Open Pit

- The Ore Reserve estimate is based on the following key elements.
  - The diluted Measured and Indicated Mineral Resources inside the pit designs
  - Mine planning and scheduling assumptions based on detailed Mining Contract tender submission, and current industry practices suited to the style of deposit and mineralization
  - Consideration of all other mining, metallurgical, social, 0 environmental, statutory and financial aspects of eth project
  - Cost estimates completed with a relative accuracy of +/-15% and is in line with the guidelines published in the AusIMM Cost Estimation Handbook Monograph 27
  - As part of the DFS, Core Lithium have engaged preferred 0 contractors for the Mining Operation, and EPC and Front Ed Engineering & Design of the Processing Plant
- There are no unforeseen modifying factors at the time of this • statement that will have any material impact on the Ore Reserve

• Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.

- The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.
- Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.
- It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.

Discussion of relative

accuracy/

confidence



### estimate.

## <u>Underground</u>

• The study meets the PFS requirements as defined under the JORC Code and is considered to have an accuracy of +/- 20%.