

# ASX: CXO Announcement

12 December 2019

# World-class pegmatite intersection at Finniss

# Highlights

- World-class 119m drill intersection<sup>1</sup> of pegmatite at BP33 Prospect;
- New intersection includes 105m of strongly mineralised spodumene pegmatite;
- New outstanding spodumene pegmatite intersections are outside of, and will substantially extend, the current Mineral Resource at BP33;
- Two other recent RC drillholes at BP33 also intersected pegmatite outside the current Mineral Resource, with an upgraded Mineral Resource and Ore Reserve estimate planned for the March 2020 quarter;
- The expanded, high-grade lithium deposit at BP33 is expected to contribute significantly to an increased mine life at the Finniss Lithium Project;
- Drill assays for recent diamond drilling at BP33 expected in January ahead of substantial Mineral Resource upgrade;
- Mining studies and updated Feasibility Study, to be completed in H1 2020, are expected to show high-grade continuous mineralisation at BP33 and Carlton is amenable to efficient underground mining methods; and
- Approvals and financing discussions continuing and further offtake progressing, with the plan for the project to be development ready as market conditions improve in 2020.

<sup>&</sup>lt;sup>1</sup> Downhole intersections are not true widths owing to oblique nature of drill holes, and true with can only be assessed from sectional views. Refer to figures in announcement.



Advanced Australian lithium developer Core Lithium Ltd (**Core** or **Company**) (ASX: CXO) is pleased to announce a world-class spodumene pegmatite intersection at the BP33 Prospect within the Finniss Lithium Project, located near Darwin in the Northern Territory.

A world-class 119-metre continuous intersection of pegmatite was drilled by the Company as part of a recent deep RC and diamond drilling program at the BP33 Prospect.

Visual inspection of a 105m interval of the drill core and under UV light suggests that spodumene grades<sup>2</sup>. are in line with or better than the average grade 1.5%  $Li_2O$  of the BP33 orebody (Figure 1).



*Figure 1. Large light-green spodumene crystals in new pegmatite drill core from BP33.* 

<sup>&</sup>lt;sup>2</sup> Visual estimations of spodumene grade using UV is at best semi-quantitative and only assay results can be used to provide accurate grades.



Of note are the very coarse spodumene crystals of the BP33 pegmatite (Figure 1), which are typical of the spodumene pegmatites within the Finniss Lithium Project. The coarse crystalline nature enables the high recovery of lithium by simple, gravity dense media separation (**DMS**). Effective DMS separation translates into significantly lower capex, lower processing costs and low start-up risk.

The outstanding drill result indicates that the primary pegmatite body at BP33 extends with an ~40m true width for at least a further 100m vertically from previous drilling on that section and remains open at 400m vertical depth (refer Figure 2 and Figure 3).

All the holes completed during the recent RC and diamond drilling program intersected spodumene mineralised pegmatite outside of the current BP33 Mineral Resource and are therefore expected to substantially expand the defined Mineral Resource at BP33.

Assay results from the recently completed RC and diamond core drilling programs at BP33 are expected in January and in combination with previously recently released RC drilling results will be used to upgrade BP33 shortly thereafter.

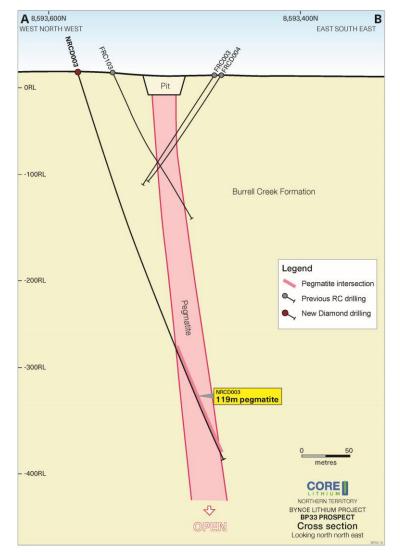


Figure 2. Cross section at BP33 showing pegmatite intersections in previous and recent drilling.



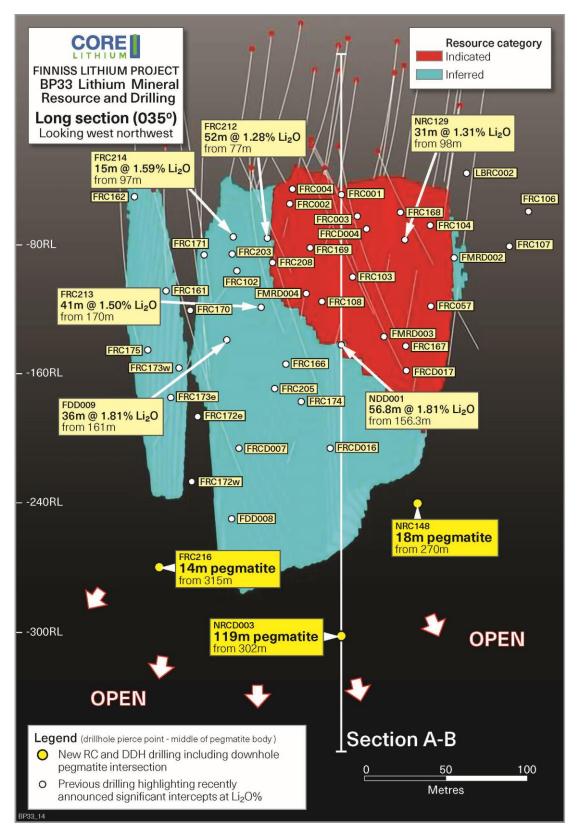


Figure 3. Long section for BP33 showing the current Mineral Resource (coloured by grade and segregated into resource category), showing previous recent assays and new drilling geology results (intercept widths are not estimated true width) as mid-pegmatite pierce points (ASX announcements released as "High-grade Intersections at BP33 update" on 15 October 2019).

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#### Mining Studies highlight opportunities for underground mining at BP33 and Carlton

Early mining studies at BP33, and also Carlton, have highlighted important opportunities to increase mining efficiency and to substantially extend mine life and will be applied to the upcoming Mineral Resource expansion updates over coming months.

These opportunities include the potential to substantially increase Ore Reserves and mine life through the addition of cost-efficient underground mining of the wide, near vertical pegmatite orebodies that continue at depth at BP33 and Carlton, subsequent to developing Grants as a simple open-cut mining operation.

The new mining studies and updated feasibility study are expected to be completed in H1 2020 following the updated Mineral Resource estimate.

#### Approvals process nearly finalised

Core has successfully completed the NTEPA assessment process, which paves the way for Project's Mining Management Plan (**MMP**) at Grants. Core is currently working with the NT Department of Primary Industry and Resources (**NTDPIR**) to secure final approval to enable mining and construction of the processing facility at Grants.

Core has provided all information requested by the NTDPIR, and although the feedback from NTDPIR has been positive and reasonable, the timeline to complete this final approval step is taking longer than expected. Core is in regular communication at multiple levels within the NTDPIR to ensure approval once due process is complete.

#### Market commentary

The lithium market has suffered from spodumene over supply during 2019. However, medium- and longer-term lithium demand is expected to exceed supply of lithium for lithium batteries to support global growth in electric vehicle and renewable energy storage.

The Company is progressing with the approvals process and progressing discussions with financiers and lithium customers to enable the project to be Final Investment Decision ready as the market recovers, expected to be during 2020. We are well placed to be Australia's next lithium producer and the first shovel-ready lithium infrastructure project in the Northern Territory.

#### Substantial value enhancing continues

The DFS clearly indicated the substantial upside potential for shareholders from increasing the mine life at Finniss.



As such, we have been drilling and undertaking resource and mining studies at Grants, BP33, Carlton, Lees, Booths and Hang Gong, all aimed at potentially increasing Mineral Resources and Ore Reserves.

The outstanding new drill results combined with recent mining studies for Carlton and BP33 indicate that the wide, near vertical pegmatite bodies are potentially amenable to efficient underground mining methods, along with significant potential identified to materially increase the Finniss mine life.

Core's Managing Director, Stephen Biggins, commented:

"Core's latest world-class spodumene pegmatite intersection at BP33 highlights the significant upside potential for the Finniss Lithium Project.

"Core are focused over coming months on increasing value for shareholders by growing Mineral Resources and increasing the mine-life of the Project.

"We are confident in having the Project shovel-ready in early 2020, so that we are wellpositioned to be Australia's next lithium Producer as market conditions improve."

#### About Core

Core is well positioned to be Australia's next Lithium Producer, developing one of Australia's most capital efficient and lowest cost spodumene lithium projects located in close proximity to Darwin Port.

Core's 2019 DFS highlights production of 175,000tpa of high-quality lithium concentrate at a C1 Opex of US\$300/t and US\$50M Capex through simple and efficient DMS (gravity) processing of some of Australia's highest-grade lithium resources.

Core is currently working toward increasing resources, reserves and mine-life ahead of project construction and lithium production, subject to financing and regulatory approvals.

The Finniss Lithium Project has arguably the best supporting infrastructure and logistics chain to Asia of any Australian lithium project. The Finniss Lithium Project is within 25km of port, power station, gas, rail and 1 hour by sealed road to workforce accommodated in Darwin and importantly to Darwin Port - Australia's nearest port to Asia.

Core has established an offtake and prepayment agreement and is also in the process of negotiating further agreements with some of Asia's largest lithium consumers and producers.



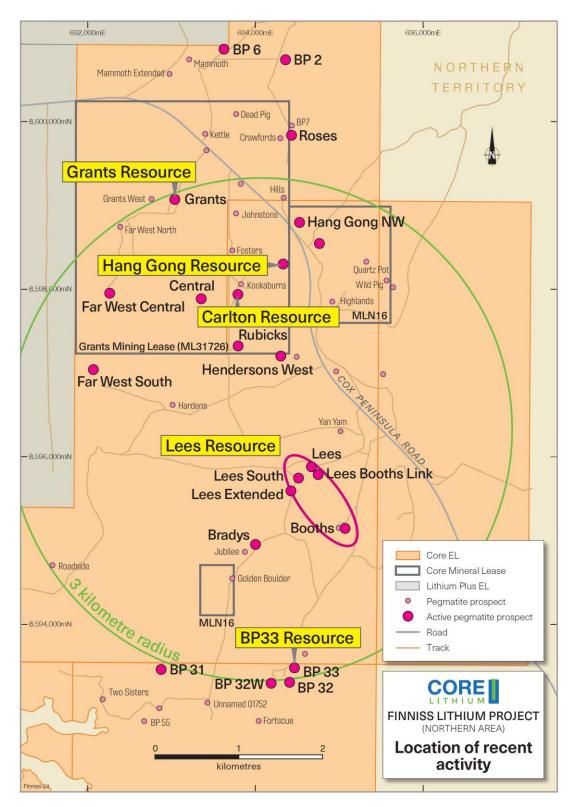


Figure 4. Main prospects in the northern Finniss Project area, showing the close proximity of BP33, Carlton and Grants Deposits



Drillhole ID	Primary Targ	et Pegmatite		Secondary	Target Pegma	itite
	From (m)	Int Width	True Width	From (m)	Int Width	True Width
NRCD003	302.25	118.95	40	100	10	7
NRC148	270	18	10	112	6	4
FRC216	315	14	10	113	5	4

Table 1 Recently drilled deep RC and DDH holes at BP33, with main pegmatite intercepts and approximate estimates of true width

#### Authorise for release by the Board of Core Lithium Ltd.

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#### Competent Persons Statements

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Stephen Biggins (BSc(Hons)Geol, MBA) an employee of Core Lithium Ltd who is a member of the Australasian Institute of Mining and Metallurgy and is bound by and follows the Institute's codes and recommended practices. He has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Biggins consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. This report includes results that have previously been released under JORC 2012 by Core.

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 in the announcements "Grants Lithium Resource Increased by 42% ahead of DFS" dated 22 October 2018, "Over 50% Increase in BP33 Lithium Resource to Boost DFS" dated 6 November 2018, "Maiden Sandras Mineral Resource Grows Finniss to 6.3Mt" dated 29 November 2018, "Finniss Mineral Resource Grows to 8.6Mt with Hang Gong" dated 31 January 2019, "Upgrade of Mineral Resource at Carlton Grows Finniss Project" dated 12 March 2019, "Finniss Feasibility Study and Maiden Ore Reserve" dated 17 April 2019 and "Initial Resource for Lees Drives Finniss Mineral Resource" dated 6 May 2019 continue to apply and have not materially changed. The Mineral Resources and Ore Reserves underpinning the production target have been prepared by a Competent Person in accordance with the requirements of the JORC code. Core confirms that the Company is not aware of any new information or data that materially affects the information included in this announcement and confirms that all material assumptions underpinning production target and forecast financial information derived from the production target announced on 17 April 2019 as "Finniss Definitive Feasibility Study and Maiden Ore Reserve" continue to apply and have not materially changed.



MINERAL RESOURCES					
Deposit		Tonnes (Mt)	Li <sub>2</sub> O %	Li <sub>2</sub> O (t)	LiCO₃ (t)
	Measured	1.09	1.48	16,100	39,815
Grants	Indicated	0.82	1.54	12,600	31,160
	Inferred	0.98	1.43	14,000	34,622
	Total	2.89	1.48	42,700	105,597
	Indicated	0.63	1.39	9,000	22,257
BP33	Inferred	1.52	1.56	24,000	59,352
	Total	2.15	1.51	33,000	81,609
Sandras	Inferred	1.30	1.0	13,000	32,149
	Total	1.30	1.0	13,000	32,149
	Indicated	0.46	1.3	6,000	14,838
Carlton	Inferred	0.63	1.3	8,000	19,784
	Total	1.09	1.3	14,000	34,622
Hang Gong	Inferred	1.42	1.2	17,000	42,041
	Total	1.42	1.2	17,000	42,041
Lees	Inferred	0.78	1.3	9,700	23,988
	Total	0.78	1.3	9,700	23,988
Finniss Project	Total	9.63	1.3	129,400	320,006

Table 2 Mineral Resource Estimates for Finniss Project



ORE RESERVES				
Deposit /Resource	Classification	Tonnes (Mt)	Grade (Li <sub>2</sub> O%)	Contained Metal (kt)
Grants	Proved	1.0	1.4	14.9
Grants	Probable	0.8	1.5	11.6
Grants Sub-total		1.9	1.5	26.5
BP33	Probable	0.4	1.3	5.7
Total Reserves		2.2	1.4	32.2

Table 3 Ore Reserve Estimates for Finniss Project



# JORC Code, 2012 Edition – Table 1 Report

# 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>Reverse circulation (RC) and diamond core (DDH) drill techniques have been employed for the Core Lithium Ltd ("Core" or "CXO") at BP33, during late October to early December 2019. A list of the hole IDs and positions can be found in the "Drill hole information" section below. Hole NRCD003 consists of a RC precollar to 192m and a DDH tail to EOH.</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.</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 directly into trays, marked up by metre marks and secured as the drilling progressed. Geological logging and sample interval selection took place soon after.</li> <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.</li> </ul>
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple</li> </ul>	<ul> <li>RC Drilling was carried out by Bullion Drilling (Barossa Valley, SA; Schram 685 RC with 5.6-inch (143mm) face-sampling bit).</li> </ul>



Instructionor standard tube, depth of diamond tails, face sampling bit or other type, whether core is oriented and if so, by what method, etc).ODH with HQ core (100mm hole diamtere).Drill sample recovery• Method of recording and assessing core and chip sample recovery and and results assessed.• RC drill recoveries were visually estimated from volume of sample recovered. The majority of sample recover visual yestimated from volume of sample recovered. The majority of sample recover visual yestimated from volume of sample recovered. The majority of sample recover visual yestimated from volume of sample recovered. The majority of sample recover visual yestimated from volume of sample recover and prade and whether a relationship exists between sample recovery and grade and of fine/coarse material.• RC drill recover visually checked for recover, moisture and contamination and notes mapple bas may have occurred due to preferential loss/gain of fine/coarse material.• RC samples were visually checking cases undertaken when the drilling first penetrated the pegmatite mineralization, to ensure no host rock contamination took place.Logging tection proved in the loggin signalizative or quantitative in nature. Core for ore by the geologist or geotechnical.• Detailed geologist or geotechnical. more visually checking, and if builder's markers and estimates of core loss, followed by mark up and measuring of recovered or by the geologist or geotechnical. recovered core by the geologist or geotechnical. recovered core by the geologist or geotechnical. recovered in plastic core trays. • Detailed geological logging was carried out on all RC and DDH drill holes. • Deging to corede in the loggin sing visualitative or quantitative in nature. Core for costean, channel, etc) photography. • The total length and percentage of the			
recoveryand results assessed.majority of sample recoveries reported were dry and above 90% of expected.Measures take to maximise sample recovery and ensure representative nature of the samples.C samples were visually checked for recovery, moisture and contamination and notes made in the logs.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.The rigs splitter was emptied between 1m samples by hammering the cyclone bin with a mallet. The set-up of the cyclone varied between metre intervals. The cyclone and splitter was emptied between metre intervals. The cyclone and splitter were also regularly cleaned by opening the doors, visually checking, and if 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.LoggingWhether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Wineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.Detailed geological logging was carried out on all RC and DDH drill holes. Colour, and holes sere stored in full. Substary biotography. DDH core is stored in plastic core trays. DDH core is stored in plastic. Core trays. DDH core is stored in plastic core trays. DDH core is stored in plastic core trays. DDH core is stored in plastic. DDH core is stored in plast			
<ul> <li>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> <li>Wether cut or sawn and whether quarter, half or all core</li> <li>Sub-sampling</li> <li>If core, whether cut or sawn and whether quarter, half or all core</li> <li>Logging recorded lithology, mineralogy, mineralisation, weathering, colour, and other sample features.</li> <li>Logging recorded lithology, mineralogy, mineralisation, weathering, colour, and other sample features.</li> <li>RC chips are stored in plastic CC chip trays.</li> <li>DDH core is stored in plastic core trays.</li> <li>All holes were logged in full.</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> <li>RC chip trays and DDH core trays are photographed and stored on the CXO server.</li> </ul>		<ul> <li>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</li> </ul>	<ul> <li>majority of sample recoveries reported were dry and 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 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>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>
	Logging	<ul> <li>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> </ul>	<ul> <li>Logging recorded lithology, mineralogy, mineralisation, weathering, colour, and other sample features.</li> <li>RC chips are stored in plastic RC chip trays.</li> <li>DDH core is stored in plastic core trays.</li> <li>All holes were logged in full.</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>



sample preparation	<ul> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <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</li> </ul>	
	being sampled.	
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> </ul>	Assay results not discussed in this report.
	• 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.	
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	Assay results not discussed in this report.
	<ul> <li>Discuss any adjustment to assay data.</li> </ul>	
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> </ul>	<ul> <li>A hand-held GPS has been used to determine all collar locations at this stage. Collar position audits are regularly undertaken, and no issues have arisen.</li> <li>The grid system is MGA_GDA94, zone 52 for easting, northing and RL.</li> <li>Hole will soon be collected by Differential GPS with precision of 10 cm, so the</li> </ul>



	Quality and adequacy of topographic control.	<ul> <li>coordinates in this report can be considered interim.</li> <li>All 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.</li> <li>The DDH tail was surveyed at hole completion using a digital downhole magnetic tool (Boart Longyear TruShot).</li> <li>The local topographic surface will be used to generate the final RL of the collars, given the large errors obtained by GPS. The RL of hole is the tables herein are rough estimates only at this stage, but within 2-3m of 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> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Drill spacing are approximately 40m along strike and 30-80m vertical, as illustrated in the Long Section.</li> <li>Assay results not discussed in this report, but intervals are generally composited to 1m intervals.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<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>Estimates of true thickness for each hole have been tabulated in the announcement to avoid confusion.</li> <li>No sampling bias is believed to have been introduced.</li> </ul>
Sample security	• The measures taken to ensure sample security.	Assay results not discussed in this report.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• No audits or reviews of the data associated with this drilling have occurred.



# 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 by CXO took place on EL30015 and EL29698, which are 100% owned by CXO.</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	Acknowledgment and appraisal of exploration by other parties.	<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> <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> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <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 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 BP33, Hang Gong and Booths in 2016, targeting surface workings dating back to the 1980s. The operators at that time were seeking Tin and Tantalum.</li> <li>CXO subsequently drilled BP33, Grants, Far West, Central, Ah Hoy and several other prospects in 2016.</li> <li>After purchase of the Liontown tenements in 2017, CXO drilled Lees, Booths, Carlton and Hang Gong.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>The tenements listed above cover the northern and central 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, Booths, Lees, Hang Gong, Ah Hoy, Far West Central and Sandras.</li> </ul>



Criteria	JORC Code explanation	Commentary
exploration results including a tabulation of the following information	<ul> <li>All holes RC and from BP33 Prospect, EL30015 and EL29698.</li> <li>Coordinates are GDA94 zone 52.</li> </ul>	
	<ul> <li>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 exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	HoleIDEastNorthRLDip hTNAzimut hTNTD omPeg_F omPeg_I oPeg_F tPeg_I o_2Peg_I nt_2Peg_I nt_2Peg_I nt_2Peg_I nt_2Peg_I nt_3 </td
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>	<ul> <li>Assay results not discussed in this report.</li> </ul>
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>All holes have been drilled at angles of between 68 - 73° and "lifted" by up to 10 degrees at target depth. The pegmatite dips steeply to the east and therefore the western-collared drillholes are oblique in a dip sense.</li> <li>Hole were drilled approximately perpendicular to the strike of the pegmatites as mapped (refer to Table above for azi and dip data).</li> <li>Some holes deviated in azimuth and therefore are marginally oblique in a strike sense.</li> <li>Based on rough assessment of drill sections, true width represents about 35-70% of the intercept width, as outlined in the drillhole table.</li> </ul>



Criteria	JORC Code explanation	Commentary
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>	<ul> <li>Refer to Figures and Tables in the release.</li> </ul>
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	<ul> <li>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         <ul> <li>size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul> </li> </ul>	• All meaningful and material data has been reported.
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	• CXO will undertake resource definition in coming months, once assays have been returned.