



# **ASX: CXO ANNOUNCEMENT**

**18 December 2018** 

# Maiden Mineral Resource at Carlton Grows Finniss Project Global Resource to 7.1Mt

### **HIGHLIGHTS**

- Rapidly growing Finniss Lithium Project Global Mineral Resource Estimate (MRE) now totals 7.1Mt at 1.4% Li<sub>2</sub>O
- Further resource expansion and infill drilling planned, ahead of Definitive Feasibility Study (DFS) finalisation, including:
  - Mineral Resource upgrade in Q1 2019 at Carlton; and DFS
  - Additional Mineral Resource Estimates in January 2019 from Hang Gong and Lees-Booths Link
- Expanded global resource base expected to result in an increased mine life at the Finniss Project and aimed at further enhancing project economics
- Potential for substantial upside in considering these new Mineral Resources in the current DFS
- Considerable scope remains to further increase the Mineral Resource from additional lithium-rich pegmatites within Core's large >500km² of tenure at Finniss

Emerging Northern Territory lithium developer, Core Lithium Ltd (ASX:CXO) (**Core** or the **Company**), is pleased to announce the global Mineral Resource for the Company's Finniss Lithium Project in the Northern Territory (**Finniss Project**) has increased to now total **7.1Mt @ 1.4% Li<sub>2</sub>O** with the addition of a new Mineral Resource Estimate (**MRE**) at the Carlton Deposit (Table 1).

The new lithium Mineral Resource at Carlton is located within the same Mining Lease application area as the Grants Lithium Deposit and within a few hundred metres of the proposed mine and processing facility at Grants. The Mining Lease covering both Carlton and Grants is expected to be granted in the next month.





Commenting on the results, Core Lithium's Managing Director, Stephen Biggins, commented:

"The global Mineral Resource for the Finniss Project has increased rapidly from 1.8Mt at the start of 2018 to 7.1Mt at year end. Core's management is of the view that the global Mineral Resource will grow even further in January, given the quality of the drilling results received from the recent exploration drilling at Hang Gong and Lees-Booths Link.

"These new Mineral Resources have the potential to add substantial upside to the economics of the Finniss Lithium Project, in addition to the lithium Mineral Resources already defined."

The spodumene pegmatite at Carlton is defined at surface by a shallow, 200m long and 15m-20m wide pit, mined historically for tin and tantalum. The regular shape of the existing pit is consistent with the downhole drilling, but the body is actually much longer and closer to 300m long as defined by Core's recent drilling (Figures 1 & 2).

A number of Core's drillholes also intersected weathered pegmatite to the east of the main pegmatite body at Carlton. This opens up the possibility that there are other concealed pegmatites close to the currently identified main body at Carlton and will be a target for future drilling.

The maiden Mineral Resource Estimate at Carlton is expected to be upgraded in scale and in confidence category with the next round of resource drilling. The next phase of RC and diamond resource drilling is planned to commence at Carlton during January 2019.

The Finniss Project resource is expected to materially increase further in coming weeks as new Mineral Resource Estimates are announced at Hang Gong and the Lees-Booths Link in January 2019.

The rapidly increasing global Mineral Resource enhances the potential for the Finniss Project to deliver robust returns, which are expected to be confirmed by the DFS work that is currently underway.

Core is undertaking a DFS for the development of a spodumene concentrate operation at the Finniss Project and is aiming to build on the strong financial outcomes highlighted in the Pre-Feasibility Study (PFS) (refer to ASX announcement 25 June 2018). The Company is targeting commencement of mining and construction in mid-2019 and first production of high-quality spodumene concentrate in late 2019, subject to financing and regulatory approvals.

The Finniss Project has arguably the best supporting infrastructure and logistics chain to Asia of any Australian lithium project. The Finniss 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 offtake and prepayment agreements and is also in the process of negotiating and finalising further agreements with some of Asia's largest lithium producers that support and finance the Project's modest capex requirements and the Company into production in 2019.





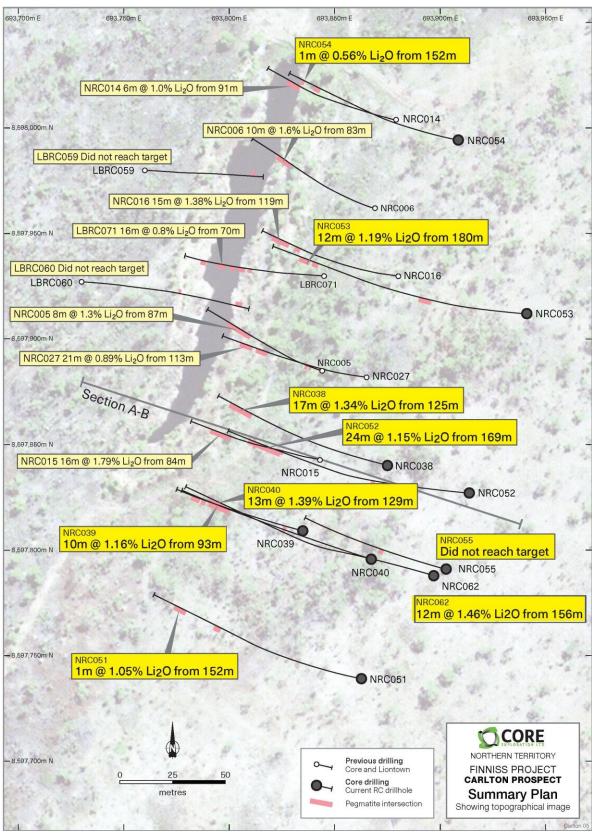


Figure 1. Recent RC drill intersections at Carlton Prospect in plan.





## **Carlton and Finniss Project Mineral Resource**

The result of the Mineral Resource Estimate is provided in Table 1 and Figures 1-3.

Deposit		Tonnes (Mt)	Li₂O %	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
Grants	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
Sanuras	Total	1.30	1.0	13,000	32,149
Coulton	Inferred	0.79	1.3	10,000	24,730
Carlton	Total	0.79	1.3	10,000	24,730
Finniss Project	Total	7.13	1.38	98,700	244,085

**Table 1.** Mineral Resource Estimate for Carlton and the Finniss Lithium Project. Grants (22/10/18), BP33 (06/11/18) and Sandras (29/11/18) Mineral Resources are unchanged. Grants, BP33 and Carlton use a 0.75% Li<sub>2</sub>O cut-off, whereas Sandras uses at 0.6% Li<sub>2</sub>O cut-off.

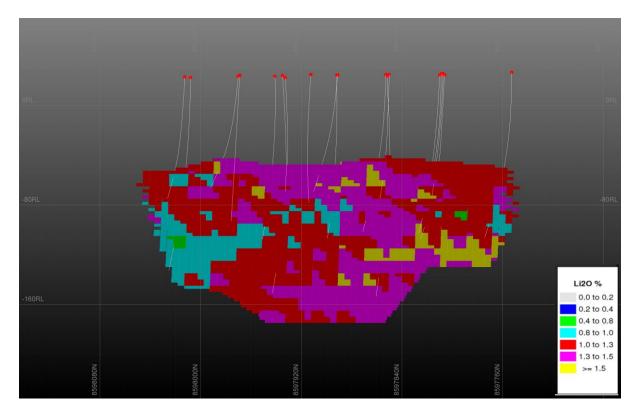


Figure 2. Lithium Grade (% Li<sub>2</sub>O) block model for Carlton Mineral Resource, Finniss Lithium Project.





## **Summary of Mineral Resource Estimate and Reporting Criteria**

Dr Graeme McDonald (BSc PhD MAusIMM) was contracted by Core Lithium to undertake the Mineral Resource Estimate for the Carlton Lithium Deposit. As part of the preparation of the Resource Estimate, Dr McDonald developed a geological interpretation based on cross sections, generated a 3D geological interpretation from interpreted cross sections, created domain interpretations for lithium, developed a block model of the deposit, undertook a geostatistical analysis of the data and estimated lithium grades.

### Geology and geological interpretation

The Carlton Lithium Deposit is hosted within a rare element pegmatite that is a member of the Bynoe pegmatite field. The Bynoe Pegmatite Field is situated 15km south of Darwin and extends for up to 70km in length and 15 km in width. Over 100 pegmatites are known within clustered groups or as single bodies. Individual pegmatites vary in size from a few metres wide and tens of metres long up to larger bodies tens of metres wide and hundreds of metres long.

The pegmatites are predominantly hosted within the early Proterozoic metasedimentary lithologies of the Burrell Creek Formation and are usually conformable to the regional schistosity. The Bynoe pegmatites are classified as LCT (Lithium-Caesium-Tantalum) type and are believed to have been derived from the  $^{\sim}$  1845 Ma S-Type Two Sisters Granite which outcrops to the west.

Fresh pegmatite at Carlton is composed of coarse quartz, albite, microcline, spodumene and muscovite (in decreasing order of abundance). Spodumene, a lithium bearing pyroxene (LiAl(SiO<sub>3</sub>)<sub>2</sub>), is the predominant lithium bearing phase and displays a diagnostic red-pink UV fluorescence. The pegmatite appears to be zoned, with a thin (1-2m) quartz-mica-albite wall facies. The pegmatite also has small zones of internal waste comprising predominantly Burrell Creek Formation sediments that are weakly mineralised.

#### **Drilling techniques and hole spacing**

The Carlton drillhole database used for the MRE contains a total of 18 RC holes for 2,664m of drilling.

The majority of holes have been drilled at angles of between 60° - 66° and approximately perpendicular to the strike of the pegmatite and on sections approximately 40m apart.

The 3 RC holes were drilled by Liontown Resources (Liontown) in 2017. All remaining drill holes were drilled by Core throughout 2017 and 2018. Geological and assay data for all drill holes was used in the geological interpretation and MRE.

#### Sampling and sub-sampling

Samples were collected from RC drilling and when submitted for assay typically weighed 2-5kg over an average 1m interval. RC sampling of pegmatite for assays is 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. RC samples were homogenised and subsampled by cone splitting at the drill rig.





#### Sample analysis method

Sample Preparation - The samples have been sorted and dried. RC samples are universally fine-grained and do not require primary crushing. The samples have been split with a riffle splitter to obtain a sub-fraction which has then been pulverised to 95% passing 100µm.

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.

In the 2017 drilling, all samples were also analysed via the fusion method - a 0.3 g sub-sample is fused with a Sodium Peroxide Fusion flux and then digested in 10% hydrochloric acid. ICP-OES is used for the following elements: Li, P and Fe. Exhaustive checks of this data suggested an excellent correlation exists, so in 2018 a 3000 ppm Li trigger was set to process that sample via a fusion method.

In the case of the Liontown data, 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.

Standards, blanks and duplicates have all been applied in the QAQC methodology. Sufficient accuracy and precision have been established for the type of mineralisation encountered and is appropriate for QAQC in the Resource Estimation.

#### **Cut-off grades**

The current Mineral Resource Inventory for the Carlton Deposit has been reported at a cut-off grade of 0.75% Li<sub>2</sub>O. No top cuts were applied.

#### **Estimation methodology**

Geology and mineralisation wireframes were generated in Micromine software using drill hole data supplied by Core. Resource data was flagged with unique lithology and mineralisation domain codes as defined by the wireframes and composited to 1m lengths.

Grade continuity analysis was undertaken in Micromine software for  $\text{Li}_2\text{O}$  for the mineralised domain and models were generated in all three directions. Parameters were used in the block model estimation. A block model with a parent block size of 5 x 20 x 10m with sub-blocks of 1.25 x 5 x 2.5m has been used to adequately represent the mineralised volume, with sub block estimated at the parent block scale.

There is no density data for Carlton material, but it is reasonable to apply the same density as that determined for the nearby Grants and BP33 deposits. The values used are consistent with expected values for the lithologies present and the degree of weathering. Within the block model, density has been assigned based on lithology and oxidation state.

## **Classification criteria**

Resource classification has been applied to the Mineral Resource Estimate based on the drilling data spacing, grade and geological continuity, and data integrity. All of the Mineral Resource





satisfies the requirements to be classified as an Inferred Mineral Resources. The classification reflects the view of the Competent Person.

#### Mining and Metallurgy

It has been assumed that the traditional open cut mining method of drill, blast, load and haul will be used and that the material would be processed at the proposed Grants processing facility nearby. No other mining assumptions have been made.

No metallurgical recoveries have been applied to the Mineral Resource Estimate.

#### **Eventual Economic Extraction**

It is the view of the Competent Person that at the time of estimation there are no known issues that could materially impact on the eventual extraction of the Mineral Resource

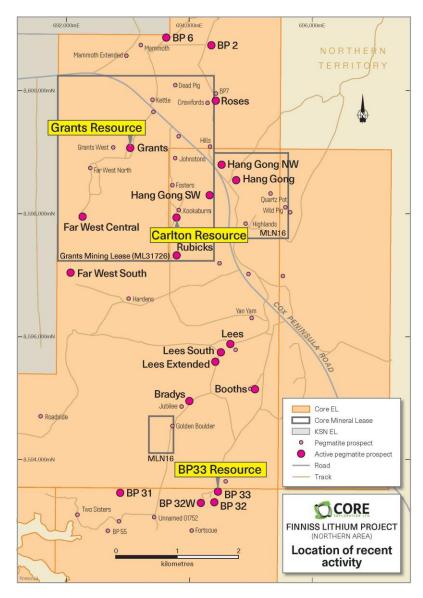


Figure 3. Location of Carlton Resource and active exploration sites within vicinity of Grants





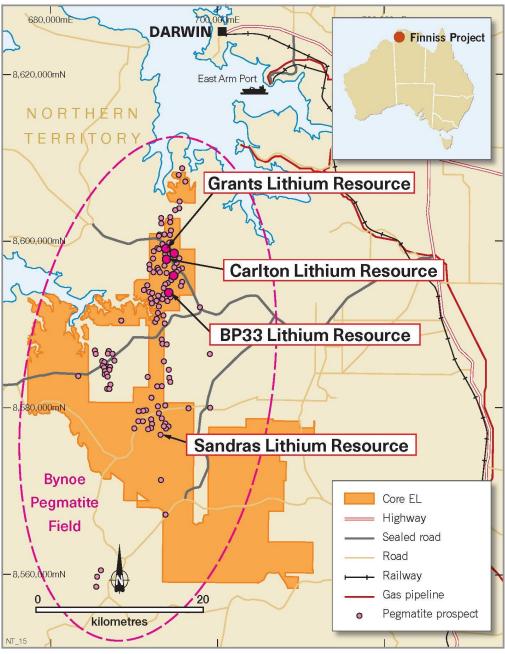


Figure 4. Location of Carlton Resource within Core's 100%-owned Finniss Lithium Project

Hole No.	Prospect	GDA94 Grid Easting	GDA94 Grid Northing		From_(m)	To_(m)	Interval (m)	Grade_(Li <sub>2</sub> O %)
NRC062	Carlton	693897.0	8597788.0		156.0	168.0	12.0	1.46
				including	163.0	166.0	3.0	2.12

**Table 2.** Drilling assay results for Carlton. This is the only outstanding result that was used for the MRE.





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### **Competent Persons Statements**

The information in this report that relates to Exploration Results is based on, and fairly represents, information and supporting documents compiled by Dr David Rawlings (BSc(Hons)Geol, PhD) 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". Dr Rawlings 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.

The information in this release that relates to the Estimation and Reporting of Mineral Resources is based on, and fairly represents, information and supporting documents compiled by Dr Graeme McDonald (BSc(Hons)Geol, PhD). Dr McDonald acts as an independent consultant to Core Lithium Ltd on the Carlton Deposit Mineral Resource estimation. Dr McDonald is a member of the Australasian Institute of Mining and Metallurgy and has sufficient experience with the style of mineralisation, deposit type under consideration and to the activities 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" (The JORC Code). Dr McDonald consents to the inclusion in this report of the contained technical information relating to the Mineral Resource Estimation 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 estimates in the announcements "Over 50% Increase in BP33 Lithium Resource to Boost DFS" dated 6 November 2018, "Grants Lithium Resource Increased by 42% ahead of DFS" dated 22 October 2018 and "Maiden Sandras Mineral Resource Grows Finniss to 6.3Mt" dated 29 November 2018 continue to apply and have not materially changed. The Mineral Resources underpinning the production target have been prepared by a Competent Person in accordance with the requirements of the JORC code. Core confirms that all material assumptions underpinning production target and forecast financial information derived from the product target announced on 25 June 2018 continue to apply and have not materially changed.

The report includes results that have previously recently been released under JORC 2012 by Core as listed in the table below. The Company is not aware of any new information that materially affects the information included in this announcement.





Date	ASX Announcement
29-Nov-18	Maiden Sandras Mineral Resource Grows Finniss to 6.3Mt
27-Nov-18	Carlton and Hang Gong to Boost Finniss Resource Base
06-Nov-18	Over 50% increase in BP33 Lithium Resource to boost this month's Definitive Feasibility Study
1-Nov-18	Exploration Further Boosts Finniss Lithium Project Potential
22-Oct-18	Grants Lithium Resource Increased by 42% ahead of DFS
22-Aug-18	More Wide High-grade Lithium Intersections at BP33
16-Aug-18	New Exploration Intersections Add to Finniss Potential
2-Aug-18	Improved Recovery of High-Grade Lithium Concentrate
24-Jul-18	New high-grade Assay Results expected to expand Grants
6-Jul-18	Extensions to Grants Lithium Deposit
25-Jun-18	Finniss Pre-Feasibility Study
23-May-18	Maiden Resource Estimate at BP33
8-May-18	Grants Lithium Resource Upgrade
6-Apr-18	High-Grade Lithium Assays to Upgrade Resource Confidence
8-Mar-18	Multiple High-grade Lithium Intersections at Grants
1-Feb-18	Drilling Commenced to Upgrade Grants Lithium Resource
23-Jan-18	Core Re-Commences Lithium Resource Drilling at BP33
8-May-17	Core Defines First Lithium Resource in the NT





# JORC Code, 2012 Edition – Table 1 report template

## **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) drill techniques have been employed for the Core Lithium Ltd ("Core" or "CXO") and Liontown Resources Ltd ("Liontown" or "LTR") drilling at Carlton, over the period mid-2016 to late 2018. A list of the 18 hole IDs and positions can be found in the "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> </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,</li> </ul>	<ul> <li>Drilling technique was exclusively Reverse Circulation (RC) using a face sampling bit. Drilling was carried out by a number of operators but using</li> </ul>





Criteria	JORC Code explanation	Commentary
	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).	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).
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 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> </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>Detailed geological logging was carried out on all RC 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.</li> <li>All holes were logged in full.</li> </ul>





Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<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 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> </ul>	<ul> <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 are photographed and stored on the CXO server.</li> <li>The majority of the mineralised samples were collected dry, as noted in the drill logs and database.</li> <li>The field sample preparation followed industry best practice.</li> <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> </ul>
	<ul> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Field RC duplicates</li> <li>A field duplicate sample regime is used to monitor sampling methodology and 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.</li> <li>The duplicates cover a wide range of Lithium values.</li> <li>Results of duplicate analysis show an acceptable degree of correlation given the heterogeneous nature of the pegmatite and the methodology for the primary sample used by Liontown.</li> </ul>





Criteria	JORC Code explanation	Commentary
Criteria	JORC Code explanation	Carlton Li Duplicates  12000  y = 0.9335x R <sup>2</sup> = 0.9836
		Sample preparation CXO drilling  Sample prep occurs at North Australian Laboratories ("NAL"), Pine Creek, NT.  RC samples do not require any crushing, as they are largely pulp already.
		<ul> <li>RC samples do not require any crusning, as they are largely pulp already.</li> <li>A 1-2 kg riffle-split of RC Samples are then prepared by pulverising to 95% passing -100 um.</li> <li>In 2017, samples were pulverized in a Kregormill, a vertical spindle based pulveriser). In mid-2017, Steel Ring Mills were installed at NAL to reduce</li> </ul>





Criteria	JORC Code explanation	Commentary
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>	the iron contamination that was recognised in the 2017 Drilling program assays.  LTR drilling  Sample prep occurred at ALS in Perth, WA.  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.  CXO drilling  Sample analysis also occurs at North Australian Laboratories, Pine Creek, NT.  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.  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 for Li by this method are 10 ppm and 20,000 ppm respectively.  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.
		<ul> <li>drilling.</li> <li>One in twelve duplicates were used for this drilling.</li> <li>One in forty blanks were inserted for this drilling.</li> </ul> LTR drilling
		A sub-sample of the pulp was assayed by sodium peroxide fusion ICPMS
		A sub-sample of the pulp was assayed by sodium peroxide rusion ICPINS





	1	
Criteria	JORC Code explanation	Commentary
Criteria	JORC Code explanation	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  One in 20 certified Lithium reference standards were used. CXO used six standards roughly between 1,700 ppm and 10,000 ppm Li, covering the range of expected Li values in the mineralized pegmatite.  The standards reported back with an excellent correlation. Overall the standards average within 1% of the expected value for Li.  Blanks were inserted on a 1 in 40 basis.  The data from the blanks pulverised and assayed at NAL indicate that the Li content is very low and well below the effective cut-off grade used for the significant intercepts.  The baseline Fe <sub>2</sub> O <sub>3</sub> content of blanks is 4300 ppm Fe, which is indicative of Iron being stripped from the steel pulverising equipment at the NAL
		<ul> <li>laboratory. This stripping of metal obviously has an effect on the Fe content of the Lithium bearing samples as well.</li> <li>One in 12 field duplicates were used for Carlton RC drilling, as discussed above.</li> <li>There were no apparent issues identified with any of this data.</li> <li>CXO runs regular Umpire analysis and has found excellent agreement.</li> <li>QAQC of LTR drilling</li> </ul>
		<ul> <li>Due to the small number of holes drilled by LTR at Carlton there is only a small number of associated QAQC samples. This included 2 field duplicates, 2 standards and no blanks. However, Core as part of its due diligence collected a further 17 duplicate "check assays". There were no apparent issues identified with this data, especially as they were analysed at different laboratories.</li> </ul>
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</li> </ul>	<ul> <li>Senior technical personnel have visually inspected and verified the significant drill intersections.</li> <li>No holes have been twinned at this stage, although NRC040 and NRC062 intersect within 10m of each other and can be used to assess</li> </ul>





Criteria	JORC Code explanation	Commentary
	verification, data storage (physical and electronic) protocols.  • Discuss any adjustment to assay data.	<ul> <li>heterogeneity at this scale. Results are consistent.</li> <li>All field data is entered into excel spreadsheets (supported by look-up tables) at site and subsequently validated as it is imported into the centralized CXO Access database. LTR data had a similar origin and has been subsequently validated by CXO before importation into CXO's database. Some lithology codes had to be rationalized in this process.</li> <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> </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> <li>Quality and adequacy of topographic control.</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>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 CXO holes were surveyed with a Pathfinder digital camera.</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, given the large errors obtained by GPS. Cross-checking by CXO at Grants and BP33, where there is DGPS control, 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</li> </ul>	The nominal drill hole spacing is 40 metres between drill sections. The majority of sections have had more than one hole drilled. The drill intercept spacing down dip is roughly 40m.





Criteria	JORC Code explanation	Commentary
	Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.  • Whether sample compositing has been applied.	<ul> <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	<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>Holes are oblique in a dip sense.</li> <li>No sampling bias is believed to have been introduced.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Sample security was managed by the CXO and LTR. 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.</li> </ul>
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 by CXO and LTR took place within EL30015, which is 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	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</li> </ul>





Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>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 Carlton in 2016, targeting surface workings dating back to the 1980s. The operators at that time were seeking Tin and Tantalum.</li> <li>The tenement covers the northern portion of a swarm of complex zoned</li> </ul>
Geology	• Deposit type, geological setting and style of militeralisation.	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  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.  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.





Criteria	JORC Code explanation	Commentary						
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the</li> </ul>	Hole_ID	East	North	RL	Azi	Dip	TD
	exploration results including a tabulation of the following	LBRC059	693760	8597980	24.3	93.0	-66.0	130
	information for all Material drill holes:	LBRC060	693730	8597927	25.0	93.0	-60.0	132
	<ul> <li>easting and northing of the drill hole collar</li> </ul>	LBRC071	693845	8597930	24.1	273.0	-60.0	115
	<ul> <li>elevation or RL (Reduced Level – elevation above sea level in</li> </ul>	NRC005	693844	8597885	24.6	286.5	-61.6	113
	metres) of the drill hole collar	NRC006	693869	8597962	23.5	289.7	-61.5	113
		NRC014	693879	8598004	22.9	285.3	-59.6	118
	·	NRC015	693843	8597843	25.0	280.8	-60.1	119
	<ul> <li>down hole length and interception depth</li> </ul>	NRC016	693880	8597930	23.5	273.4	-65.1	148
	<ul> <li>hole length.</li> </ul>	NRC027	693865	8597882	24.5	277.3	-66.6	150
	<ul> <li>If the exclusion of this information is justified on the basis that the</li> </ul>	NRC038	693875	8597840	25.0	281.3	-61.0	154
	information is not Material and this exclusion does not detract from	NRC039	693830	8597801	25.7	283.5	-60.5	118
	<ul> <li>the understanding of the report, the Competent Person should clearly explain why this is the case.</li> <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>	NRC040	693867	8597796	25.5	282.6	-60.3	160
		NRC051	693863	8597739	26.8	282.0	-60.0	172
		NRC052	693914	8597827	23.7	278.9	-61.2	214
		NRC053	693941	8597912	22.4	272.6	-60.2	214
		NRC054	693909	8597994	22.5	280.6	-65.1	178
		NRC055	693903	8597791	24.4	285.0	-59.0	130
		NRC062	693897	8597788	24.6	286.4	-60.6	186
methods		<ul> <li>Any sample c averages of the method beca</li> <li>0.4% Li<sub>2</sub>O was intersections material of be</li> <li>No metal equivalent</li> </ul>	ne 1 m assay use the dens s used as low with allowa elow cut-off	ys. Length we sity of the roo ver cut off gr nce for includ grade (interr	ighted avock (pegmades for didng up to hall dilutional)	verages an atite) is co compositi o 3m of co on).	e accepta onstant. ng and re	ble porting
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</li> </ul>	<ul> <li>The majority approximatel pegmatite is intersection t down hole lea</li> </ul>	y perpendic vertical to st rue widths a	ular to the N eeply dipping	NE strike g to the e	of the pe	gmatite. T ch minera	he lised





Criteria	JORC Code explanation	Commentary
	should be a clear statement to this effect (e.g. 'down hole length, true width not known').	
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	<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>	<ul> <li>CXO will undertake follow up drilling at the Carlton in the following months to expand and infill resource.</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	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection	A data check of source assay data and survey data has been undertaken and compared to the database. No translation issues have been	
	and its use for Mineral Resource estimation purposes.	identified. The data was validated during the interpretation of the	





Criteria	JORC Code explanation	Commentary		
	Data validation procedures used.	<ul> <li>mineralisation, with no significant errors identified. Only RC 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 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>	<ul> <li>Graeme McDonald (CP) undertook a site visit during November/December 2017 and September 2018. A review of the drilling, logging, sampling and QAQC procedures has been undertaken. All processes and procedures were in line with industry best practice.</li> </ul>		
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 interpretation is considered robust due to the nature of the mineralisation. The mineralisation is hosted within the pegmatite. The locations of the hangingwall and footwall of the pegmatite intrusion are well understood with drilling which penetrates both contacts.</li> <li>Reverse circulation drill holes have been used in the MRE. Lithology, structure, alteration and mineralisation data has been used to generate the mineralisation model. The primary assumption is that the mineralisation is hosted within structurally controlled pegmatite, which is considered robust. Additional surface exposure within the historic pit helps to constrain the pegmatite contacts.</li> <li>Due to the nature of the drilling data and the geological continuity conveyed by this dataset, no alternative interpretations have been considered.</li> <li>The mineralisation interpretation is based on a lithium cut-off grade of 0.3% Li<sub>2</sub>O, hosted within the pegmatite.</li> <li>The pegmatite is considered to be continuous over the length of the deposit. It thins and pinches out to the north and south. A nonmineralised wall rock phase of 1-2m thickness is often present. Within the pegmatite, the mineralisation is not as continuous as that seen at Grants and BP33. The pegmatite has small zones of internal waste</li> </ul>		





	83.4°		
Criteria	JORC Code explanation	Commentary	
		comprising predominantly Burrell Creek Formation sediments that are weakly mineralised. A single mineralised grade domain has been identified and estimated using a hard boundary. Internal waste was isolated into a separate domain and estimated independently.	
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>The lithium is hosted within a 320m 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 200m below surface.</li> <li>Whilst continuous, the pegmatite body does appear to narrow to the north and south. The pegmatite is deeply weathered to depths of approximately 50m 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> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> </ul>	<ul> <li>Grade estimation of lithium has been completed using Ordinary Kriging (OK) into a single mineralised domain using Micromine software. Internal waste was isolated into a separate domain and estimated independently. Variography has been undertaken on the grade domain composite data. Variogram orientations are largely controlled by the strike and dip of the mineralisation. The number of samples and good geological continuity has allowed meaningful directional variograms to be calculated in two of the three directions. The model in the third direction is poor, however, this is often the most difficult direction to model.</li> <li>There have been no previous estimates. A check estimate using an alternative estimation technique (ID2) has also been undertaken.</li> <li>No assumptions have been made regarding recovery of any by-products.</li> <li>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 20 m (Y) by 10 m (Z) with a sub-block size of 1.5 m (X) by 5 m (Y) by 2.5 m (Z) has been used to define the mineralisation, with the lithium estimated at the parent block scale.         <ul> <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 70m, with samples from a minimum of two drill holes.</li> </ul> </li> </ul>	





Criteria	JORC Code explanation	Commentary
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	<ul> <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 140m, with samples from a minimum of two drill holes.</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 210m, with samples from a minimum of two drill holes.</li> <li>No selective mining units are assumed in this estimate.</li> <li>Lithium only has been estimated within the mineralised domain. 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 file. The flagged intercepts have then been used to create composites in Micromine. The composite length is 1 m in all data.</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	<ul> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	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 MRE, a 0.75 Li<sub>2</sub>O% cut-off has been used after consultation with CXO.</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</li> </ul>	<ul> <li>It has been assumed that the traditional open cut mining method of drill, blast, load and haul will be used and that the material would be processed at the proposed Grants processing facility nearby.</li> <li>No other assumptions have been made at this time.</li> </ul>





Criteria	JORC Code explanation	Commentary	
	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.		
Metallurgical factors or assumptions	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 assumptions made.	<ul> <li>No metallurgical recoveries have been applied.</li> <li>It is assumed that the material would be processed and concentrated at a facility located at the Grants deposit.</li> </ul>	
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>	No environmental assumptions have been made during the MRE.	
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> </ul>	<ul> <li>There have been no direct measurements of any drill samples at the Carlton deposit. Therefore, given the relative uncertainties associated with this MRE it is appropriate at this stage to assign SG values based on those determined at the nearby Grants and BP33 deposits as part of their MRE's. A value of 2.72 g/cm³ has been assigned to all fresh mineralisation and a value of 2.13 g/cm³ to all oxidised mineralisation. This is not considered unreasonable, given the lithology is directly comparable, with the same mineral species in similar concentrations.</li> </ul>	





Criteria	JORC Code explanation	Commentary
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	
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 MRE based on the drilling data spacing, grade and geological continuity, and data integrity.</li> <li>The classification takes into account the relative contributions of geological and data quality and confidence, as well as grade confidence and continuity.</li> <li>The classification reflects the view of the Competent Person.</li> </ul>
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	This MRE has not been audited by an external party.
Discussion of relative accuracy/ confidence	<ul> <li>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 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>	<ul> <li>The relative accuracy of the MRE is reflected in the reporting of Mineral Resources 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.</li> <li>Historically, only a small amount of tin/tantalum has been 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 MRE.</li> </ul>