



ASX: CXO ANNOUNCEMENT

12 March 2019

Upgrade of Mineral Resource at Carlton grows Finniss Project Global Resource to 8.85Mt

HIGHLIGHTS

- Rapidly growing Finniss Lithium Project Global Mineral Resource Estimate (**MRE**) now totals 8.85Mt at 1.3% Li₂O;
- 38% increase in the Mineral Resource at Carlton to 1.1Mt @ 1.3% Li₂O in 3 months, with 42% now in Indicated category;
- Further Mineral Resource expansion expected in coming weeks, ahead of Definitive Feasibility Study (**DFS**) finalisation, including:
 - Mineral Resource Estimate upgrade for Hang Gong;
 - Maiden Mineral Resource Estimate for Lees-Booths Link;
- Further upside for additional Mineral Resources adjacent to Carlton to be tested in 2019;
- Carlton Mineral Resource located 1km from Grants Mineral Resource and within the same recently granted Mineral Licence (**ML**);
- Expanded global Finniss Mineral Resource base increases potential for an increased mine life at the Finniss Project and is aimed at further enhancing project economics; and
- Considerable scope remains to further increase the Finniss Mineral Resource from additional lithium-rich pegmatites within Core's large >500km² of tenure at Finniss when the field season commences in mid Q2 2019.

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 **8.85Mt @ 1.3% Li₂O** with the addition of a new Mineral Resource Estimate (**MRE**) at the Carlton Deposit (Table 1). The Carlton MRE now stands at 1.1Mt @ 1.3% Li₂O.



The Carlton MRE has increased by 38% over the past 3 months (ASX:CXO 18 December 2018) of which 42% is now in the higher confidence Indicated category.

The updated lithium Mineral Resource at Carlton is located within the same granted Mining Lease area as the Grants Lithium Deposit and one kilometre from the proposed mine and processing facility at Grants (Figure 5). The Mineral Lease covering both Carlton and Grants was granted in January 2019.

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.

The Finnis Project Mineral Resource is expected to materially increase further in coming weeks as an upgraded Mineral Resource Estimate is announced at Hang Gong and a new Mineral Resource Estimate is announced at Lees-Booths Link.

Further to the additional Mineral Resources expected to be announced later in March, resource and exploration drilling will continue to focus on resource expansion, when the 2019 field season commences in mid Q2 2019.

As recently announced, diamond core drillhole NMRD003 also intersected a second pegmatite to the west of the main pegmatite body at Carlton (ASX:CXO 1 March 2019). Assay results for this hole were received subsequent to the Resource Estimation herein. Significant intersections in NMRD003 are 26.3m @ 1.33% Li₂O from 194.7m including 5.7m @ 2.07% Li₂O from 197.4m and; 16m @ 0.72% Li₂O from 241m.

The concealed extent of this western pegmatite has not been determined at this stage, is open to the south and may even have an oblique strike to the main body defined in this MRE. 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, expected to commence mid Q2 2019.

Core is undertaking a DFS for the development of a spodumene concentrate operation at the Finnis Project and is aiming to build on the strong financial outcomes highlighted in the Pre-Feasibility Study (PFS) (ASX:CXO 25 June 2018). The Company is targeting commencement of mining and construction in Q3 2019 and to ramp up commercial scale production of high-quality spodumene concentrate in early 2020, subject to financing and regulatory approvals.

The Finnis Project has arguably the best supporting infrastructure and logistics chain to Asia of any Australian lithium project. The Finnis 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.



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 8.85Mt at present. Core’s management is of the view that the global Mineral Resource is likely to grow even further over coming weeks.

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

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Carlton and Finniss Project Mineral Resource

The results of the updated Mineral Resource Estimate are provided in Table 1 and Figures 2-3.

Deposit		Tonnes (Mt)	Li ₂ O %	Li ₂ O (t)	LiCO ₃ (t)
Grants	Measured	1.09	1.48	16,100	39,815
	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
BP33	Indicated	0.63	1.39	9,000	22,257
	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
Carlton	Indicated	0.46	1.3	6,000	14,838
	Inferred	0.63	1.3	8,000	19,776
	Total	1.09	1.3	14,000	34,608
Hang Gong SW	Inferred	1.42	1.2	17,000	42,024
	Total	1.42	1.2	17,000	42,024
Finniss Project	Total	8.85	1.3	119,700	295,898

Table 1. Mineral Resource Estimate for Carlton and the Finniss Lithium Project.

Grants (22/10/18), BP33 (06/11/18), Sandras (29/11/18) and Hang Gong (31/1/19) Mineral Resources are unchanged. Grants, BP33, Hang Gong and Carlton use a 0.75% Li₂O cut-off, whereas Sandras uses at 0.6% Li₂O cut-off.

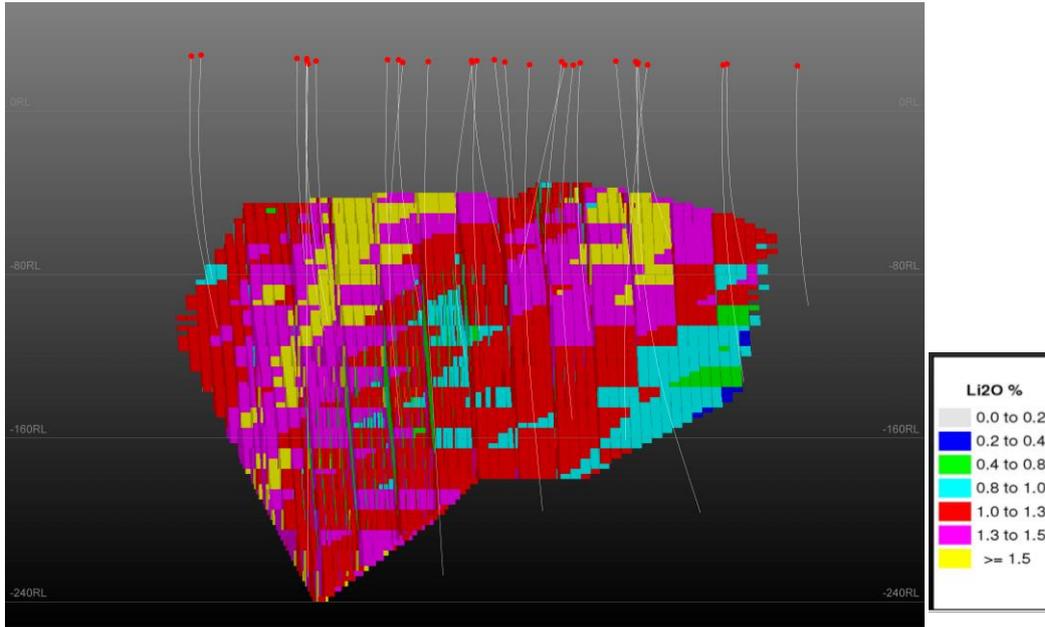


Figure 2. Lithium Grade (% Li₂O) block model (long section) for Carlton Mineral Resource, Finniss Lithium Project.

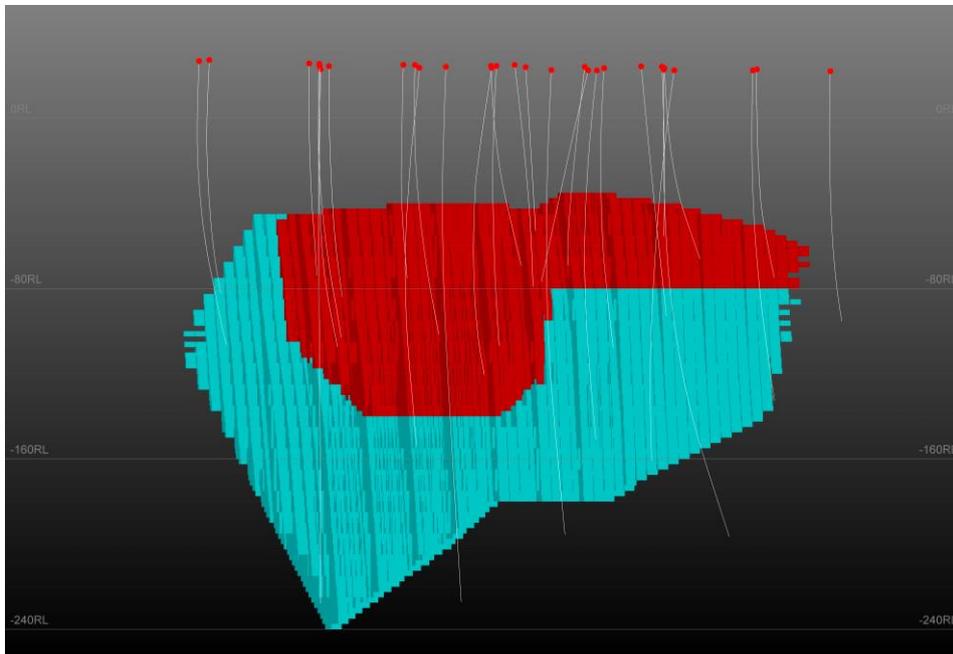


Figure 3. Resource categories for Carlton (red=Indicated, Blue=Inferred)

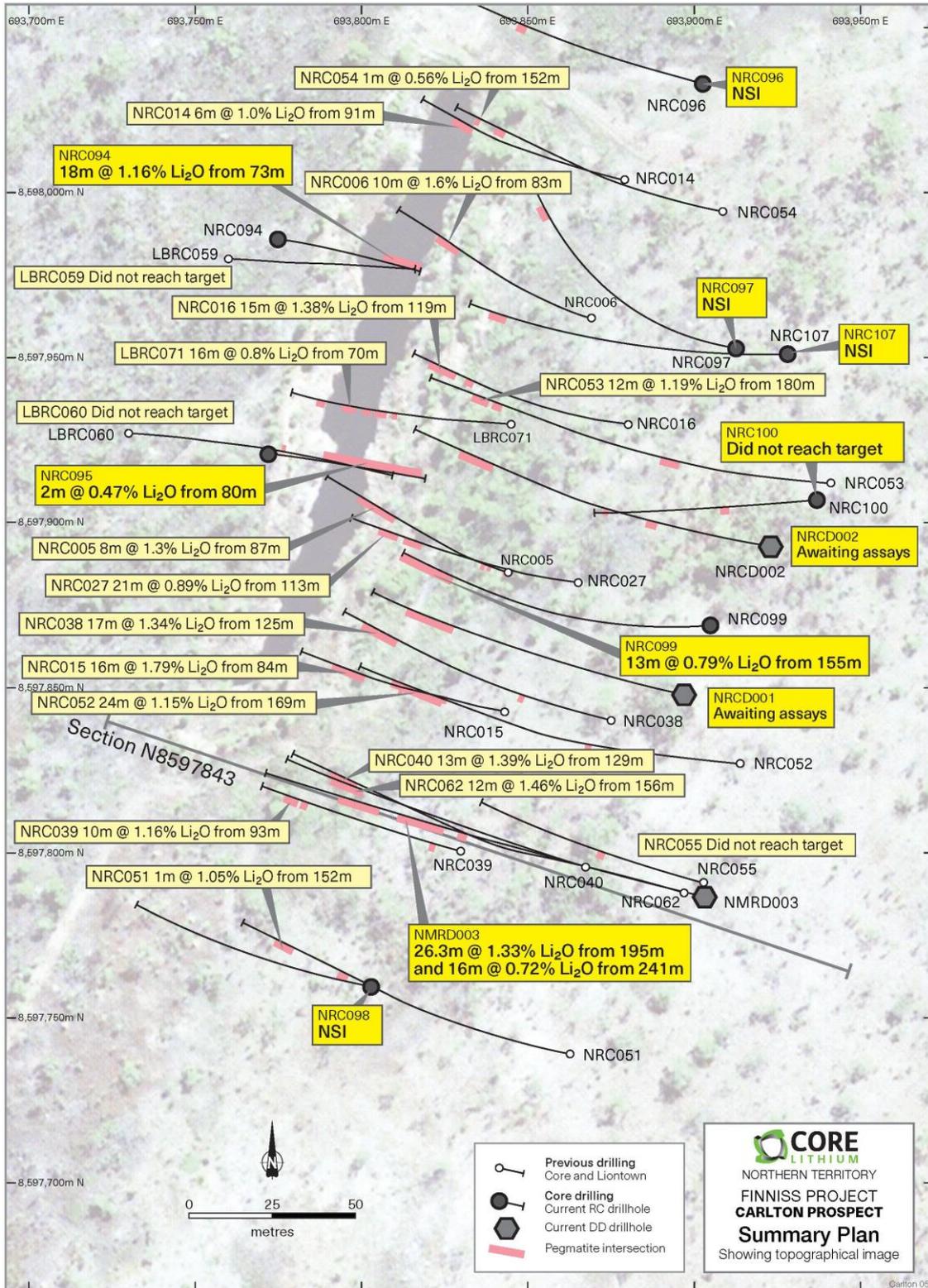


Figure 4. Recent RC and DDH drill intersections at Carlton Prospect in plan.



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 ~ 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 ($\text{LiAl}(\text{SiO}_3)_2$), 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 low-grade material comprising predominantly Burrell Creek Formation sediments mixed with narrow pegmatite bodies.

Drilling techniques and hole spacing

The Carlton drill hole database used for the MRE contains a total of 27 RC holes and 2 DD holes for 4,582.1m of drilling. The majority of holes have been drilled at angles of between 56 - 72° and approximately perpendicular to the strike of the pegmatite and on sections approximately 40m apart.

The 3 RC holes drilled by Liantown in 2017. All remaining drill holes were drilled by Core during the period late 2017 to early 2019. Geological and assay data for all RC drill holes was used in the geological interpretation and MRE. Only geological data from 2 DD holes was available at the time of the estimate and this was also used.

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% Li₂O. 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 Li₂O 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.

A small number of fresh diamond drill core samples (n=9) from the main pegmatite zone were collected and analysed for specific gravity. The average density value was very similar to those determined at the nearby Grants and BP33 deposits and is consistent with expected values for fresh pegmatitic material. Given the similarity and the small number of data points and lack of data for other lithologies and weathering states, the values used were the same as those used at Grants and BP33. 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. Portions of the model that have drill spacing of better than 30m by 40m, and where the confidence in the estimation is considered high have been classified as **Indicated Mineral Resources**. Areas that have drill spacing of greater than 30m by 40m, and/or with lower levels of confidence in the estimation or potential impact of modifying factors have been classified as **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.

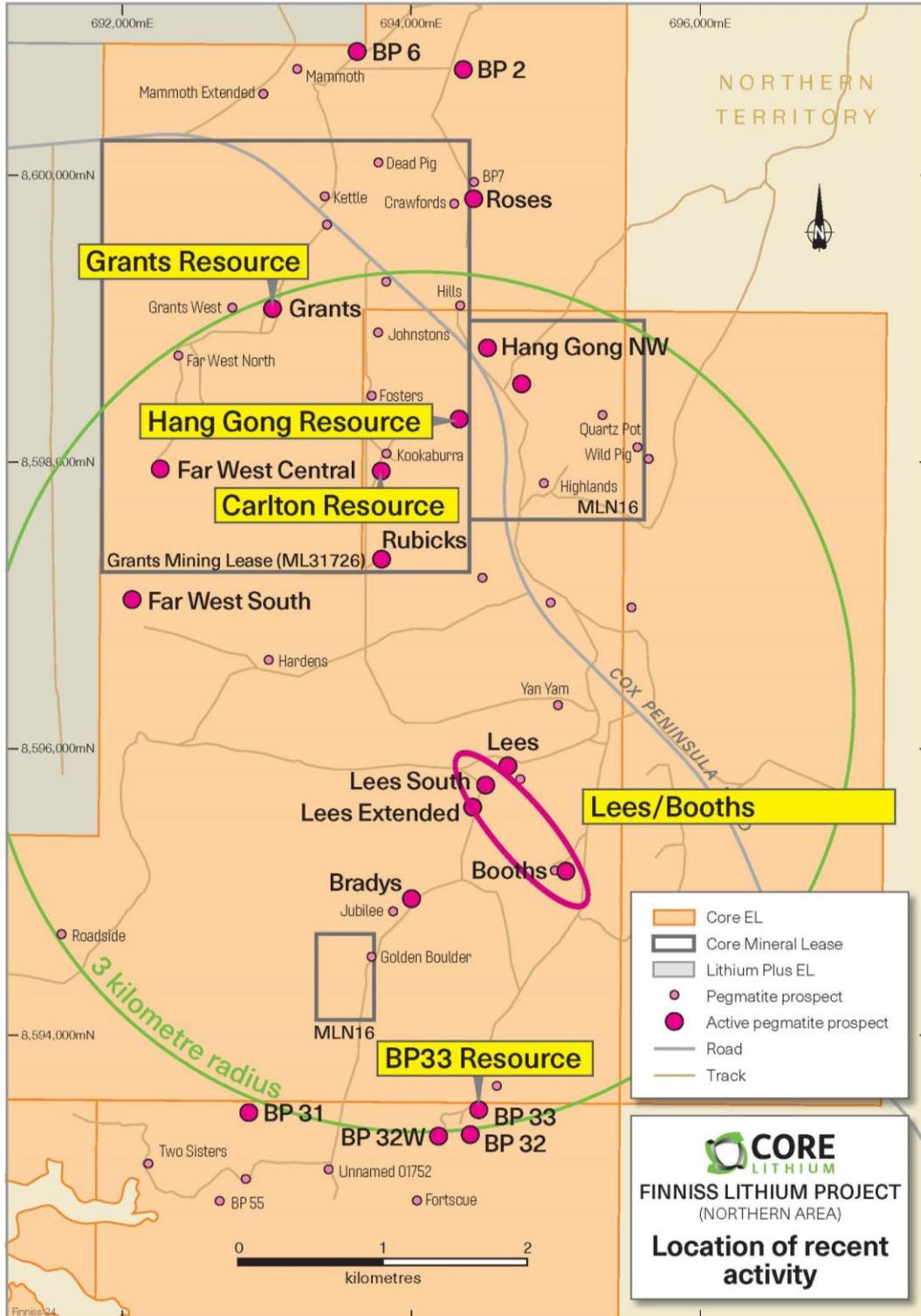


Figure 5. Location of Carlton Resource and active exploration sites within vicinity of Grants

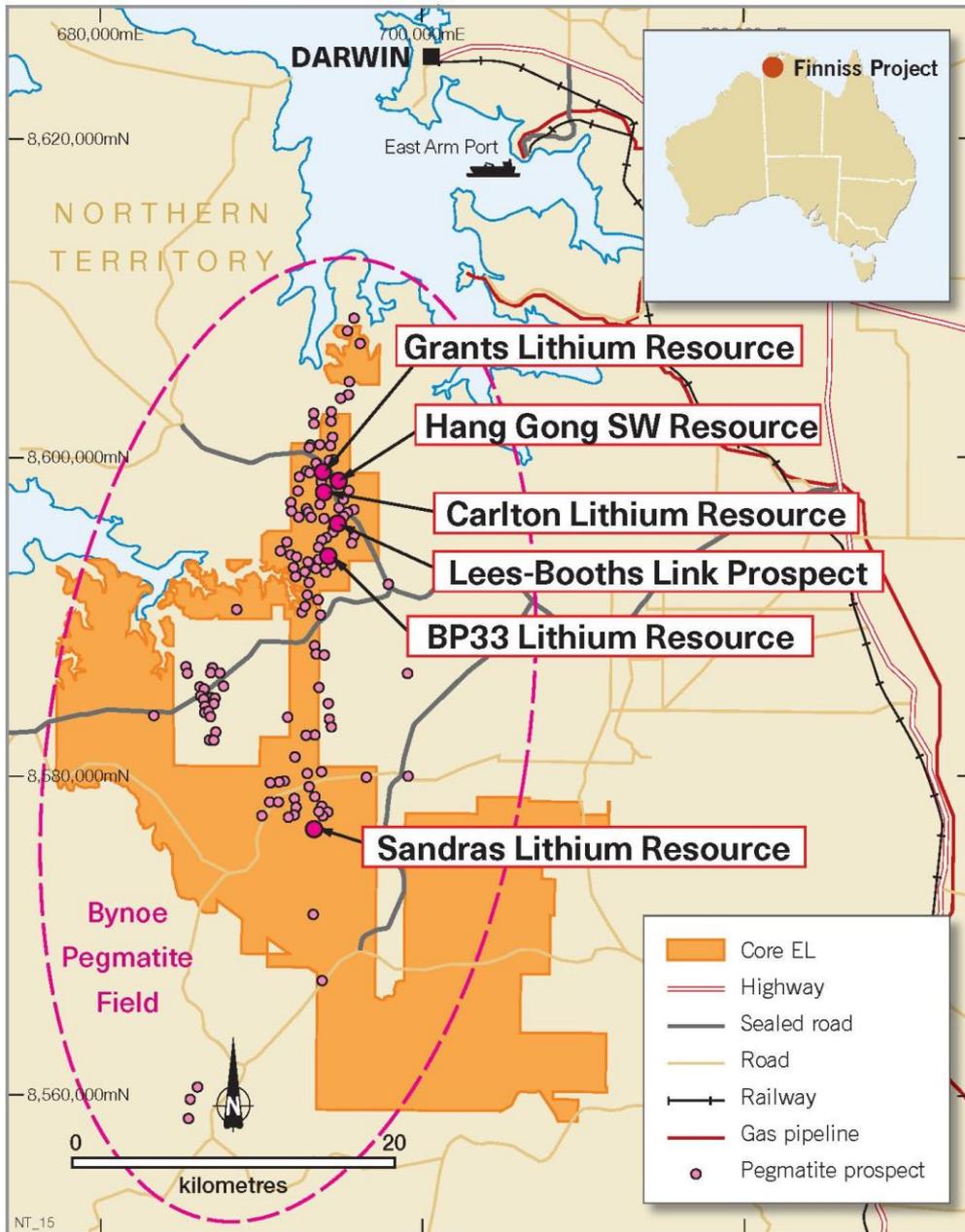


Figure 6. Location of Carlton Resource within Core’s 100%-owned Finniss Lithium Project



Hole No.	Prospect	GDA94 Grid Easting	GDA94 Grid Northing	From_(m)	To_(m)	Interval (m)	Grade_(Li ₂ O %)	
NRC094	Carlton	693775.0	8597986.0	73.0	91.0	18.0	1.2	
NRC095	Carlton	693772.0	8597921.0	80.0	82.0	2.0	0.5	
NRC096	Carlton	693903.0	8598033.0			No Significant Intercepts		
NRC097	Carlton	693913.0	8597953.0			No Significant Intercepts		
NRC098	Carlton	693803.0	8597760.0			No Significant Intercepts		
NRC099	Carlton	693905.0	8597869.0	155.0	168.0	13.0	0.8	
NRC100	Carlton	693937.0	8597907.0			Did not reach target		
NRC107	Carlton	693928.0	8597951.0			No Significant Intercepts		
NMRD003	Carlton	693905.0	8597790.0	194.7	221.0	26.3	1.33	
				including	197.4	203.1	5.7	2.07
				and	241.0	257.0	16.0	0.72

Table 2. Recent drilling assay results for Carlton. All RC assays are cyclone splits and DDH assays are quarter core. Mean grades have been calculated on a 0.4% Li₂O lower cut-off grade with no upper cut-off grade applied, and maximum length of consecutive internal waste of 3.0 metres.



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 "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 and "Finniss Mineral Resource Grows to 8.6Mt with Hang Gong" dated 31 January 2019 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 or data that materially affects the information included in this announcement.



Date	ASX Announcement
1-Mar-19	New Spodumene Pegmatite Body Discovered at Carlton
31-Jan-19	Finniss Mineral Resource grows to 8.6Mt with initial Resource Estimate for Hang Gong Deposit
17-Dec-18	Maiden Mineral Resource at Carlton grows Finniss to 7.1Mt
29-Nov-18	Maiden Sandras Mineral Resource Grows Finniss to 6.3Mt
27-Nov-18	Carlton and Hang Gong to Boost Finniss Resource Base
6-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
5-Feb-18	High-Grade Lithium Intersected in New Spodumene Pegmatites
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
<p>Sampling techniques</p>	<ul style="list-style-type: none"> 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. 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. 	<ul style="list-style-type: none"> Drilling geology, assays and resource estimation results reported herein relate to Reverse Circulation (RC) and Diamond Drill Hole (DDH) drilling by Core Lithium Ltd (“Core” or “CXO”) and Liontown Resources Ltd (“Liontown” or “LTR”) at Carlton, over the period mid-2016 to February 2018. A list of the 29 hole IDs and positions can be found in the “Drill hole information” section below. Of these, 27 are RC and 2 are DDH for a total of 4582.1m. <p>Sampling methods</p> <ul style="list-style-type: none"> RC drill spoils over all programs were collected into two sub-samples: <ul style="list-style-type: none"> 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. 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. 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. 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 >0.5% Li₂O) then the original individual metre intervals were also submitted for assay. Drill core was collected directly into trays, marked up by metre marks and



Criteria	JORC Code explanation	Commentary
		<p>secured as the drilling progressed. Geological logging and sample interval selection took place soon after.</p> <ul style="list-style-type: none"> • 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. Again, without bias, half core was then cut into two further segments. A quarter was then collected on a metre basis (where possible), bagged and sent to the North Australian Laboratory in Pine Creek, NT, for analysis. • Half core from the DDH holes will be provided to Nagrom laboratory in Perth for metallurgical testwork. The remaining quarter core is retained at Core’s storage shed in Berry Springs. • DDH sampling of pegmatite for assays is done over the sub-1m intervals described above. 1m-sampling continued into the barren phyllite host rock.
Drilling techniques	<ul style="list-style-type: none"> • Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> • Drilling techniques used for the drillholes, including precollars, were: <ul style="list-style-type: none"> ○ Reverse Circulation (RC) using a face sampling bit. Drilling was carried out by a number of operators but using the same technique. These included Geo Drilling (Bachelor NT; Schram 450 with 5-inch bit), Swick Mining Services (Perth WA; Schram 685 with 5.5-inch bit), Bullion Drilling (Barossa Valley SA; Schram W450 with 5 inch bit) and WDA Drilling (Humpty Doo NT; UDR 1000 with 5.5-inch bit). ○ Diamond Core Drilling (DDH) using standard HQ core assembly (triple tube), drilling muds or water as required, and is a wireline setup. Holes were precollared by mud rotary down to rigid bedrock (~60m) or by RC down to a depth just above the target pegmatite (~150m). The rig used for the DDH is a track-mounted Alton MD600 or HD900 DDH rig, operated by WDA Drilling Services, Humpty Doo NT.
Drill sample recovery	<ul style="list-style-type: none"> • Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximise sample recovery and ensure 	<ul style="list-style-type: none"> • RC drill recoveries were visually estimated from volume of sample recovered. The majority of sample recoveries reported were above 90% of expected.

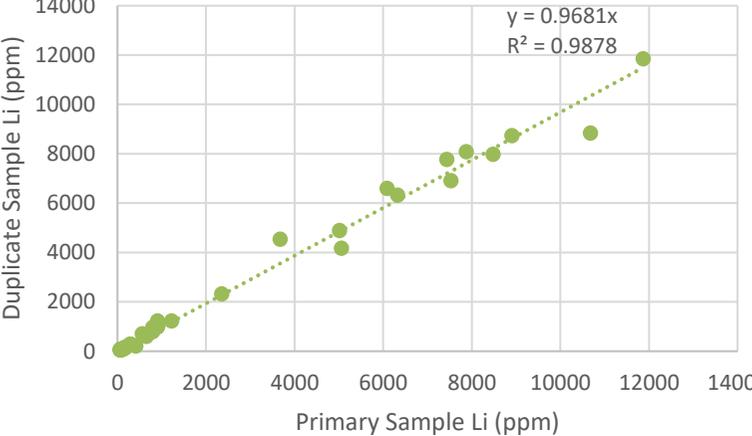


Criteria	JORC Code explanation	Commentary
	<p>representative nature of the samples.</p> <ul style="list-style-type: none"> Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> RC samples were visually checked for recovery, moisture and contamination and notes made in the logs. 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. 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. There is no observable relationship between recovery and grade at a project scale, and therefore no sample bias is anticipated. 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. While quarter core sampling has inherent risks of sampling bias due to the small sample size, there has been no material bias recognised. This involved a detailed assessment of assay grade vs drill core geology, including visual spodumene concentration.
Logging	<ul style="list-style-type: none"> 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> Detailed geological logging was carried out on all RC and DDH drill holes. The geological data is suitable for inclusion in a Mineral Resource Estimate (MRE). Logging recorded lithology, mineralogy, mineralisation, weathering, colour, and other sample features. RC chips are stored in plastic RC chip trays. DDH core is stored in plastic core trays. All holes were logged in full, including the RC and mud rotary precollars. Pegmatite sections are also checked under a single-beam UV light for



Criteria	JORC Code explanation	Commentary
		<p>spodumene identification on an ad hoc basis. These only provide indicative qualitative information.</p> <ul style="list-style-type: none"> RC chip trays and DDH core trays are photographed and stored on the CXO server. Geotechnical logging is planned for the oriented DDH core in due course.
<p>Sub-sampling techniques and sample preparation</p>	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> The majority of the mineralised samples were collected dry, as noted in the drill logs and database. The field sample preparation followed industry best practice. 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. 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. 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. Quarter Drill Core sample intervals were constrained by geology, alteration or structural boundaries, intervals varied between a minimum of 0.3 metres to a maximum of 1 m. The core is cut along a regular Ori line to ensure no sampling bias. <p>Field RC duplicates</p> <ul style="list-style-type: none"> 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. The duplicates cover a wide range of Lithium values.



Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> 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. <div data-bbox="1279 478 2107 1038" style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;">Primary vs Duplicate Sample - Li ppm</p>  <p style="text-align: center;">Sample heterogeneity</p> <ul style="list-style-type: none"> Given the pegmatite minerals, including the spodumene, are very coarse grained, there is expected to be an issue of heterogeneity. The sample size for NQ drill core is borderline, and this is why CXO have drilled using HQ diameter. Assaying of coarse rejects as part of the Umpire process in 2017 showed that there is good correlation between the original and duplicate samples at that scale. However, there is assay variability from one metre to the next that reflects the heterogeneity. This is evident when comparing assays profiles twinned DDH and RC holes at Grants and BP33 Deposits. RC tend to exhibit a flatter more consistent trend. This is because RC samples a larger volume of material for each metre and flattens out the </div>

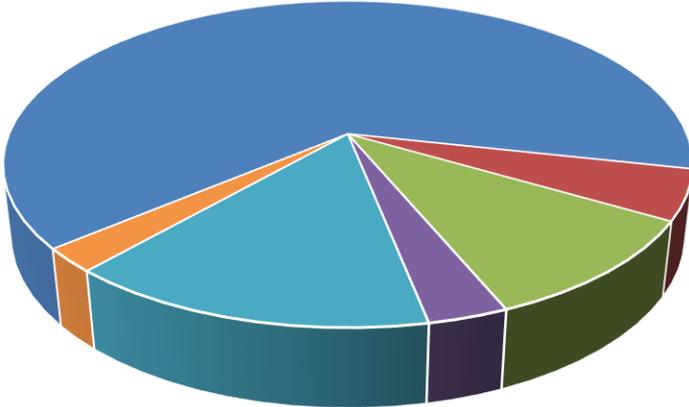


Criteria	JORC Code explanation	Commentary
		<p>fluctuations.</p> <ul style="list-style-type: none"> Quarter core is cut as described above, bagged and sent to the laboratory for analysis. As discussed, the heterogeneity of pegmatite core material means it is not suitable for “second-half” or “second-quarter” duplicate analysis. <p>Sample preparation</p> <p>CXO drilling</p> <ul style="list-style-type: none"> Sample prep occurs at North Australian Laboratories (“NAL”), Pine Creek, NT. DDH samples are crushed to a nominal size to fit into mills, approximately -2mm. RC samples do not require any crushing, as they are largely pulp already. A 1-2 kg riffle-split of RC Samples are then prepared by pulverising to 95% passing -100 um. In 2017, CXO’s samples were pulverized in a Kregormill, a vertical spindle based pulveriser). In mid-2017, Steel Ring Mills were installed at NAL to reduce the iron contamination that was recognised in the 2017 Drilling program assays. The Kregormill was not used for any Carlton samples. <p>LTR drilling</p> <ul style="list-style-type: none"> 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.
<p>Quality of assay data and laboratory tests</p>	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. Nature of quality control procedures adopted (e.g. standards, blanks, 	<p>CXO drilling</p> <ul style="list-style-type: none"> 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.



Criteria	JORC Code explanation	Commentary
	<p>duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</p>	<ul style="list-style-type: none"> • 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 small number of drill quarter core samples have been tested for specific gravity via two independent methods, immersion and wet pycnometry. A more rigorous program will be undertaken once the remaining drill core is sent to the laboratory. • One of the current DDH drillholes will be sent to Nagrom laboratory in Perth for a full suite of elements and gas pycnometry (SG). • 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 (approx. 1 in 4) and duplicates/repeats (approx 1 in 6). • Approximate CXO-implemented quality control procedures (quantified in the graphic below) include: <ul style="list-style-type: none"> ○ One in 20 certified Lithium ore standards were used for this drilling. ○ One in 13 duplicates were used for this drilling. ○ One in 27 blanks were inserted for this drilling.



Criteria	JORC Code explanation	Commentary						
		<p data-bbox="1487 400 1877 437" style="text-align: center;">Carlton Samples Analysed</p>  <table border="1" data-bbox="1420 932 1944 1002" style="margin-left: auto; margin-right: auto;"> <tr> <td>■ Samples</td> <td>■ Field Duplicates</td> <td>■ Lab Duplicates</td> </tr> <tr> <td>■ Field CRM's</td> <td>■ Lab CRM's</td> <td>■ Blanks</td> </tr> </table> <p data-bbox="1272 1038 1402 1066">LTR drilling</p> <ul data-bbox="1272 1094 2114 1182" style="list-style-type: none"> • 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. <p data-bbox="1272 1193 1570 1220">QAQC of CXO Drilling data</p> <ul data-bbox="1272 1233 2114 1423" style="list-style-type: none"> • 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. • The data from the blanks pulverised and assayed at NAL indicate that the Li content is very low (average 12 ppm) and well below the effective cut- 	■ Samples	■ Field Duplicates	■ Lab Duplicates	■ Field CRM's	■ Lab CRM's	■ Blanks
■ Samples	■ Field Duplicates	■ Lab Duplicates						
■ Field CRM's	■ Lab CRM's	■ Blanks						



Criteria	JORC Code explanation	Commentary
		<p>off grade used for the significant intercepts.</p> <ul style="list-style-type: none"> The baseline Fe₂O₃ content of blanks is 4165 ppm Fe, which is indicative of Iron being stripped from the steel pulverising equipment at the NAL laboratory. This stripping of metal obviously has an effect on the Fe content of the Lithium bearing samples as well. Field duplicates were discussed above. There were no apparent issues identified with any of this data. CXO runs regular Umpire analysis and has found excellent agreement in the past. Umpire samples for the last 10 months is currently being prepared. <p>QAQC of LTR drilling</p> <ul style="list-style-type: none"> 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.
<p>Verification of sampling and assaying</p>	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> Senior technical personnel have visually inspected and verified the significant drill intersections. No holes have been twinned at this stage, although NRC040 and NRC062 intersect within 10m of each other and can be used to assess heterogeneity at this scale. Results are consistent. 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. Hard copies of survey and sampling data are stored in the local office and electronic data is stored on the CXO server. Metallic Lithium percent was multiplied by a conversion factor of 2.15283/10000 to report Li ppm as Li₂O%.



Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> 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.
Location of data points	<ul style="list-style-type: none"> 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. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> 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. Core is currently arranging for the collars to be picked up by DGPS, but the current quality is sufficient for the level of reporting in this resource. The grid system is MGA_GDA94, zone 52 for easting, northing and RL. 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. Drill hole deviation has been minor and predictable in the most part. However, for the deeper holes, deviation was significant in the lower parts of the holes as a result of hard bedrock. Despite this, the holes still tested the targets roughly oblique to the strike of the pegmatite, which is acceptable for resource drilling. In any case, the gyro down hole survey has accurately recorded the drill traces and any deviation from the planned program can be accommodated in a 3D GIS environment. 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.
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. 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 	<ul style="list-style-type: none"> 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 35m. The mineralisation and geology show very good continuity from hole to



Criteria	JORC Code explanation	Commentary
	<p>classifications applied.</p> <ul style="list-style-type: none"> Whether sample compositing has been applied. 	<p>hole and will be sufficient to support the definition of a Mineral Resource and the classifications contained in the JORC Code (2012 Edition).</p> <ul style="list-style-type: none"> All mineralised intervals reported are based on a one metre sample interval.
<p>Orientation of data in relation to geological structure</p>	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<ul style="list-style-type: none"> 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. Holes are oblique in a dip sense. Two holes drilled recently by CXO (NRC094 and NRC095) were designed to establish the weathering profile and were therefore drilled to a large extent down-dip. These intercepts thus do not reflect true thickness. No sampling bias is believed to have been introduced.
<p>Sample security</p>	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> 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.
<p>Audits or reviews</p>	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> 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 style="list-style-type: none"> 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. 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. 	<ul style="list-style-type: none"> Drilling by CXO and LTR took place within EL30015, which is 100% owned by CXO. The Carlton resource lies within the Grants Mining Lease ML31726 which is 100% owned by CXO. EL30015 was previously owned by LTR, and in September 2017 was purchased by CXO via a sale agreement (ASX Release 14 Sept 2017). The area being drilled comprises Vacant Crown land. There are no registered heritage sites covering the areas being drilled. The tenements are in good standing with the NT DPIR Titles Division.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> The history of mining in the Bynoe area dates back to 1886 when tin was discovered by Mr. C Clark. By 1890 the Leviathan Mine and the Annie Mine were discovered and worked discontinuously until 1902. 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. By 1909 activity was limited to Leviathan and Bells Mona mines in the area with little activity in the period 1907 to 1909. 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. 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.



Criteria	JORC Code explanation	Commentary
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> 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. They then tributed the project out to a company named Fieldcorp Pty Ltd who operated it between 1991 and 1995. In 1996, Julia Corp drilled RC holes into representative pegmatites in the field, but like all of their predecessors, did not assay for Li. Since 1996 the field has been defunct until recently when exploration has begun on ascertaining the lithium prospectivity of the Bynoe pegmatites. The NT geological Survey undertook a regional appraisal of the field, which was published in 2004 (NTGS Report 16, Frater 2004). 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. The tenement covers the northern portion of a swarm of complex zoned rare element pegmatite field, which comprises the 55km long by 10km wide West Arm – Mt Finniss pegmatite belt (Bynoe Pegmatite Field; NTGS Report 16). The main pegmatites in this belt include Mt Finniss, Grants, BP33, Hang Gong and Sandras 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



Criteria	JORC Code explanation	Commentary
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Drill hole Information <ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 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. 	<table border="1"> <thead> <tr> <th>Hole_ID</th> <th>East</th> <th>North</th> <th>RL</th> <th>Azi</th> <th>Dip</th> <th>TD</th> </tr> </thead> <tbody> <tr><td>LBRC059</td><td>693760</td><td>8597980</td><td>24.3</td><td>93.0</td><td>-66.0</td><td>130</td></tr> <tr><td>LBRC060</td><td>693730</td><td>8597927</td><td>25.0</td><td>93.0</td><td>-60.0</td><td>132</td></tr> <tr><td>LBRC071</td><td>693845</td><td>8597930</td><td>24.1</td><td>273.0</td><td>-60.0</td><td>115</td></tr> <tr><td>NRC005</td><td>693844</td><td>8597885</td><td>24.6</td><td>286.5</td><td>-61.6</td><td>113</td></tr> <tr><td>NRC006</td><td>693869</td><td>8597962</td><td>23.5</td><td>289.7</td><td>-61.5</td><td>113</td></tr> <tr><td>NRC014</td><td>693879</td><td>8598004</td><td>22.9</td><td>285.3</td><td>-59.6</td><td>118</td></tr> <tr><td>NRC015</td><td>693843</td><td>8597843</td><td>25.0</td><td>280.8</td><td>-60.1</td><td>119</td></tr> <tr><td>NRC016</td><td>693880</td><td>8597930</td><td>23.5</td><td>273.4</td><td>-65.1</td><td>148</td></tr> <tr><td>NRC027</td><td>693865</td><td>8597882</td><td>24.5</td><td>277.3</td><td>-66.6</td><td>150</td></tr> <tr><td>NRC038</td><td>693875</td><td>8597840</td><td>25.0</td><td>281.3</td><td>-61.0</td><td>154</td></tr> <tr><td>NRC039</td><td>693830</td><td>8597801</td><td>25.7</td><td>283.5</td><td>-60.5</td><td>118</td></tr> <tr><td>NRC040</td><td>693867</td><td>8597796</td><td>25.5</td><td>282.6</td><td>-60.3</td><td>160</td></tr> <tr><td>NRC051</td><td>693863</td><td>8597739</td><td>26.8</td><td>282.0</td><td>-60.0</td><td>172</td></tr> <tr><td>NRC052</td><td>693914</td><td>8597827</td><td>23.7</td><td>278.9</td><td>-61.2</td><td>214</td></tr> <tr><td>NRC053</td><td>693941</td><td>8597912</td><td>22.4</td><td>272.6</td><td>-60.2</td><td>214</td></tr> <tr><td>NRC054</td><td>693909</td><td>8597994</td><td>22.5</td><td>280.6</td><td>-65.1</td><td>178</td></tr> <tr><td>NRC055</td><td>693903</td><td>8597791</td><td>24.4</td><td>285.0</td><td>-59.0</td><td>130</td></tr> <tr><td>NRC062</td><td>693897</td><td>8597788</td><td>24.6</td><td>286.4</td><td>-60.6</td><td>186</td></tr> <tr><td>NRC094</td><td>693775</td><td>8597986</td><td>24.13</td><td>101.11</td><td>-60.8</td><td>91</td></tr> <tr><td>NRC095</td><td>693772</td><td>8597921</td><td>23.93</td><td>99.98</td><td>-58.14</td><td>91</td></tr> <tr><td>NRC096</td><td>693903</td><td>8598033</td><td>22.02</td><td>282.56</td><td>-60.37</td><td>139</td></tr> <tr><td>NRC097</td><td>693909</td><td>8597951</td><td>22.77</td><td>282.51</td><td>-71.65</td><td>234</td></tr> <tr><td>NRC098</td><td>693803</td><td>8597760</td><td>27.28</td><td>282.56</td><td>-60.63</td><td>133</td></tr> <tr><td>NRC099</td><td>693905</td><td>8597869</td><td>23.72</td><td>271.86</td><td>-60.35</td><td>175</td></tr> <tr><td>NRC100</td><td>693937</td><td>8597907</td><td>22.49</td><td>265.89</td><td>-56.46</td><td>120</td></tr> <tr><td>NRC106</td><td>693923</td><td>8597893</td><td>22.4</td><td>280</td><td>-65</td><td>174</td></tr> <tr><td>NRC107</td><td>693928</td><td>8597951</td><td>22.5</td><td>268</td><td>-60</td><td>208</td></tr> <tr><td>NMRD003</td><td>693903</td><td>8597787</td><td>23</td><td>280.97</td><td>-66.3</td><td>278.7</td></tr> <tr><td>NRC001</td><td>693901</td><td>8597848</td><td>23.9</td><td>279.8</td><td>-65.16</td><td>274.4</td></tr> </tbody> </table>	Hole_ID	East	North	RL	Azi	Dip	TD	LBRC059	693760	8597980	24.3	93.0	-66.0	130	LBRC060	693730	8597927	25.0	93.0	-60.0	132	LBRC071	693845	8597930	24.1	273.0	-60.0	115	NRC005	693844	8597885	24.6	286.5	-61.6	113	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	NRC016	693880	8597930	23.5	273.4	-65.1	148	NRC027	693865	8597882	24.5	277.3	-66.6	150	NRC038	693875	8597840	25.0	281.3	-61.0	154	NRC039	693830	8597801	25.7	283.5	-60.5	118	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	NRC094	693775	8597986	24.13	101.11	-60.8	91	NRC095	693772	8597921	23.93	99.98	-58.14	91	NRC096	693903	8598033	22.02	282.56	-60.37	139	NRC097	693909	8597951	22.77	282.51	-71.65	234	NRC098	693803	8597760	27.28	282.56	-60.63	133	NRC099	693905	8597869	23.72	271.86	-60.35	175	NRC100	693937	8597907	22.49	265.89	-56.46	120	NRC106	693923	8597893	22.4	280	-65	174	NRC107	693928	8597951	22.5	268	-60	208	NMRD003	693903	8597787	23	280.97	-66.3	278.7	NRC001	693901	8597848	23.9	279.8	-65.16	274.4
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	LBRC071	693845	8597930	24.1	273.0	-60.0	115																																																																																																																																																																																																												
	NRC005	693844	8597885	24.6	286.5	-61.6	113																																																																																																																																																																																																												
	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																																																																																																																																																																																																												
	NRC016	693880	8597930	23.5	273.4	-65.1	148																																																																																																																																																																																																												
	NRC027	693865	8597882	24.5	277.3	-66.6	150																																																																																																																																																																																																												
	NRC038	693875	8597840	25.0	281.3	-61.0	154																																																																																																																																																																																																												
	NRC039	693830	8597801	25.7	283.5	-60.5	118																																																																																																																																																																																																												
	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																																																																																																																																																																																																												
	NRC094	693775	8597986	24.13	101.11	-60.8	91																																																																																																																																																																																																												
	NRC095	693772	8597921	23.93	99.98	-58.14	91																																																																																																																																																																																																												
	NRC096	693903	8598033	22.02	282.56	-60.37	139																																																																																																																																																																																																												
	NRC097	693909	8597951	22.77	282.51	-71.65	234																																																																																																																																																																																																												
NRC098	693803	8597760	27.28	282.56	-60.63	133																																																																																																																																																																																																													
NRC099	693905	8597869	23.72	271.86	-60.35	175																																																																																																																																																																																																													
NRC100	693937	8597907	22.49	265.89	-56.46	120																																																																																																																																																																																																													
NRC106	693923	8597893	22.4	280	-65	174																																																																																																																																																																																																													
NRC107	693928	8597951	22.5	268	-60	208																																																																																																																																																																																																													
NMRD003	693903	8597787	23	280.97	-66.3	278.7																																																																																																																																																																																																													
NRC001	693901	8597848	23.9	279.8	-65.16	274.4																																																																																																																																																																																																													
Data aggregation methods <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Any sample compositing reported here is calculated via length weighted averages of the 1 m assays. Length weighted averages are acceptable method because the density of the rock (pegmatite) is constant. 																																																																																																																																																																																																																		



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> 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. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> 0.4% Li₂O was used as lower cut off grades for compositing and reporting intersections with allowance for including up to 3m of consecutive drill material of below cut-off grade (internal dilution). No metal equivalent values have been used or reported.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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'). 	<ul style="list-style-type: none"> The majority of holes have been drilled at angles of between 60 - 80° and approximately perpendicular to the NNE strike of the pegmatite. The pegmatite is vertical to steeply dipping to the east. As such mineralised intersection true widths are variable but approximately 50-70% of the down hole length.
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Refer to Figures and Tables in the release.
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All exploration results have been reported.
Other substantive exploration data	<ul style="list-style-type: none"> Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	<ul style="list-style-type: none"> All meaningful and material data has been reported.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including 	<ul style="list-style-type: none"> CXO will undertake metallurgical testwork of half core from Carlton. Geotechnical logging is planned for the oriented DDH core. Follow up drilling at the Carlton is planned for May-June to expand and



Criteria	JORC Code explanation	Commentary
	the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	<p>infill the resource.</p> <ul style="list-style-type: none"> Carlton forms part of a DFS for the broader Grants Project.

Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	<ul style="list-style-type: none"> A data check of source assay data and survey data has been undertaken and compared to the database. No translation issues have been identified. The data was validated during the interpretation of the mineralisation, with no significant errors identified. 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. A DEM topography to collar check has been completed.
Site visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	<ul style="list-style-type: none"> 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.
Geological interpretation	<ul style="list-style-type: none"> Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	<ul style="list-style-type: none"> The geological interpretation is considered robust due to the nature of the mineralisation. The mineralisation is hosted within the pegmatite. The locations of the hanging wall and footwall of the pegmatite intrusion are well understood with drilling which penetrates both contacts. Reverse circulation and diamond 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



Criteria	JORC Code explanation	Commentary
		<p>helps to constrain the pegmatite contacts.</p> <ul style="list-style-type: none"> • Due to the nature of the drilling data and the geological continuity conveyed by this dataset, no alternative interpretations have been considered. • The mineralisation interpretation is based on a lithium cut-off grade of 0.3% Li₂O, hosted within the pegmatite. • The pegmatite is considered to be continuous over the length of the deposit. It thins and pinches out to the north and south. A non-mineralised 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 low-grade material comprising predominantly Burrell Creek Formation sediments mixed with narrow pegmatite bodies. High-grade and low-grade mineralised domains were identified and estimated independently using a hard boundary.
Dimensions	<ul style="list-style-type: none"> • 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 style="list-style-type: none"> • The lithium is hosted within a 300m long section of mineralised pegmatite which strikes NE and averages 10-15m in true width. • The pegmatite is steeply east dipping and has been interpreted at a depth of approximately 250m below surface. • Whilst continuous, the pegmatite body does appear to narrow to the north and south. The pegmatite is deeply weathered to depths of approximately 60m below surface.
Estimation and modelling techniques	<ul style="list-style-type: none"> • 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. • The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. 	<ul style="list-style-type: none"> • Grade estimation of lithium has been completed using Ordinary Kriging (OK) into a single high-grade mineralised domain using Micromine software. Low-grade material was isolated into a separate domain and estimated independently. Variography has been undertaken on the high-grade domain composite data and used to estimate both high and low-grade domains. 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



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> • The assumptions made regarding recovery of by-products. • Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). • In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. • Any assumptions behind modelling of selective mining units. • Any assumptions about correlation between variables. • Description of how the geological interpretation was used to control the resource estimates. • Discussion of basis for using or not using grade cutting or capping. • The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	<p>direction is poor, however, this is often the most difficult direction to model.</p> <ul style="list-style-type: none"> • This MRE compares favourably with a previous estimate undertaken in December 2018 and takes into account extra drilling that has been undertaken. • A check estimate using an alternative estimation technique (ID2) has also been undertaken. • No assumptions have been made regarding recovery of any by-products. • 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 style="list-style-type: none"> ○ Pass 1 estimation has been undertaken using a minimum of 4 and a maximum of 20 samples into a search ellipse with a radius of 70m, with samples from a minimum of two drill holes. ○ Pass 2 estimation has been undertaken using a minimum of 4 and a maximum of 20 samples into a search ellipse with a radius of 140m, with samples from a minimum of two drill holes. ○ Pass 3 estimation has been undertaken using a minimum of 4 and a maximum of 20 samples into a search ellipse with a radius of 210m, with samples from a minimum of two drill holes. • No selective mining units are assumed in this estimate. • Lithium only has been estimated within the high-grade and low-grade mineralised domains. No correlation between variables has been assumed. • 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. • The influence of extreme sample distribution outliers in the composited data has been determined using a combination of histograms and log



Criteria	JORC Code explanation	Commentary
		<p>probability plots. It was decided that no top-cuts need to be applied.</p> <ul style="list-style-type: none"> 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.
Moisture	<ul style="list-style-type: none"> Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<ul style="list-style-type: none"> The tonnes have been estimated on a dry basis.
Cut-off parameters	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> For the reporting of the MRE, a 0.75 Li₂O% cut-off has been used after consultation with CXO.
Mining factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	<ul style="list-style-type: none"> 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 assumptions have been made at this time.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> 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 style="list-style-type: none"> No metallurgical recoveries have been applied. It is assumed that the material would be processed and concentrated at a facility located at the Grants deposit.
Environmental factors or assumptions	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> No environmental assumptions have been made during the MRE.



Criteria	JORC Code explanation	Commentary
	<p>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.</p>	
<p>Bulk density</p>	<ul style="list-style-type: none"> • 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. • 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. • Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	<ul style="list-style-type: none"> • A small number of fresh diamond drill core samples (n=9) from the main pegmatite zone were collected and analysed for specific gravity. The average density value was very similar to those determined at the nearby Grants and BP33 deposits and is consistent with expected values for fresh pegmatitic material. 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.
<p>Classification</p>	<ul style="list-style-type: none"> • The basis for the classification of the Mineral Resources into varying confidence categories. • 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). • Whether the result appropriately reflects the Competent Person's view of the deposit. 	<ul style="list-style-type: none"> • The resource classification has been applied to the MRE based on the drilling data spacing, grade and geological continuity, and data integrity. • The classification takes into account the relative contributions of geological and data quality and confidence, as well as grade confidence and continuity. • The classification reflects the view of the Competent Person.
<p>Audits or reviews</p>	<ul style="list-style-type: none"> • The results of any audits or reviews of Mineral Resource estimates. 	<ul style="list-style-type: none"> • This MRE has not been audited by an external party.



Criteria	JORC Code explanation	Commentary
<p>Discussion of relative accuracy/ confidence</p>	<ul style="list-style-type: none"> • 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. • 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. • These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	<ul style="list-style-type: none"> • The relative accuracy of the MRE is reflected in the reporting of Mineral Resources as per the guidelines of the 2012 JORC Code. • The statement relates to global estimates of tonnes and grade. • No production records have been supplied as part of the scope of works, so no comparison or reconciliation has been made. • Historically, only a small amount of tin/tantalum has been 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.