

# ASX: CXO Announcement

6 March 2023

## BP33 Mineral Resource more than doubled

### Highlights

- Drilling completed as part of the ongoing Finniss Lithium Operation exploration program has led to a more than doubling of the Mineral Resource Estimate at BP33 from 4.37Mt @ 1.53% Li<sub>2</sub>O<sup>1</sup> to 10.1Mt @ 1.48% Li<sub>2</sub>O<sup>2</sup>.
- Latest drilling results have identified extensions along strike and down depth at BP33.
- The recent BP33 drilling results reinforce potential for extension of the BP33 mine design at depth and remains open down-plunge.
- Further significant growth opportunities exist beyond currently modelled resource domains at Carlton, Ah Hoy, Hang Gong and Sandras and an update to the global Mineral Resource and Ore Reserve Estimate for Finniss is now underway.
- Aggressive drill program planned at Finniss in CY23.

Australian lithium miner Core Lithium Ltd is pleased to announce a significant upgrade to Mineral Resource Estimate (MRE) at BP33, a key deposit for the Finniss Lithium Operation (Finniss) in the Northern Territory.

BP33 is the second proposed mine at Finniss currently awaiting development approval. Exploration drilling in 2022 has led to an increase in the Mineral Resource at BP33 from 4.37Mt @ 1.53% Li<sub>2</sub>O to 10.1Mt @ 1.48% Li<sub>2</sub>O.

Results were recently received from 11 drillholes targeting extensions along strike and down dip to the existing BP33 orebody (Figure 1). The drilling was completed to determine the continuity of grade and thickness down-plunge of the currently modelled mineralisation domains. Pleasingly the BP33 mineralisation appears open down plunge and along strike and has potential for increases to the BP33 Mineral Resource in future drilling programs.

In 2022, in parallel to development of the Grants Mine and processing infrastructure, that led to the production and first shipment of DSO, Core completed an expanded drilling program. Further drill results are pending from the remainder of the 2022 drilling program and work is underway to update the global Finniss Mineral Resource and Ore Reserve Estimate.

Plans are in place to continue these exploration efforts in 2023 with a further expansion of the exploration program across the Finniss project area in 2023. Core's

<sup>1</sup> Significant Increase to Finniss Lithium Project Mineral Resource and Ore Reserves, 12 July 2022

<sup>2</sup> See Table 1

objective is to identify and define additional Mineral Resources and Ore Reserves that lead to the development of mining options across the Company's Finniss tenements.

**Core Lithium CEO Gareth Manderson said:**

"This upgrade is a credit to our exploration and technical teams, who are systematically exploring the Finniss tenements while the business moves into production. These results provide further confirmation of the prospectivity of Core Lithium's ground holding.

"Importantly, BP33 remains open at depth. Exploration to extend mine life at Finniss and identify growth opportunities is a priority for the business, with an expanded drilling program for CY23."

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

**For further information please contact:**

Gareth Manderson  
Chief Executive Officer  
Core Lithium Ltd  
+61 8 8317 1700  
[info@corelithium.com.au](mailto:info@corelithium.com.au)

**For Media and Broker queries:**

Gerard McArtney  
Account Manager  
Cannings Purple  
+61 487 934 880  
[gmcartney@canningspurple.com.au](mailto:gmcartney@canningspurple.com.au)

**About Core Lithium**

Core Lithium Ltd (ASX: CXO) (Core or Company) is an Australian hard-rock lithium mining company that owns and operates the Finniss Lithium Operation on the Cox Peninsula, south-west and 88km by sealed road from the Darwin Port, Northern Territory. Core's vision is to generate sustained value for shareholders from critical minerals exploration and mining projects underpinned by strong environmental, safety and social standards.

For further information about Core and its projects, visit [www.corelithium.com.au](http://www.corelithium.com.au).

**Competent Persons Statement**

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Dr Graeme McDonald (BSc(Hons)Geol, PhD) who is a full time employee of Core Lithium Ltd and 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. McDonald consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

Core confirms that the Company is not aware of any new information or data that materially affects the results included in this announcement and further reported as "Significant Increase to Finniss Resources and Reserves" on 12 July 2022 and all material assumptions and technical parameters underpinning the Mineral Resource continue to apply and have not materially changed. The previously reported BP33 Mineral Resource is comprised of Measured Resources of 1.80Mt at 1.55% Li<sub>2</sub>O, Indicated Resources of 2.40Mt at 1.56% Li<sub>2</sub>O and Inferred Resources of 0.17Mt at 1.00% Li<sub>2</sub>O.

## BP33 Mineral Resource Update

Extensive diamond and RC drilling at BP33 throughout 2022 has culminated in an updated Mineral Resource Estimate (MRE) for the BP33 Deposit of 10.1Mt at 1.48 % Li<sub>2</sub>O (Table 1 and Figure 1). This represents a more than doubling of the previously reported BP33 MRE in July 2022. Importantly, there is now 6.94Mt of the Mineral Resource, at 1.50% Li<sub>2</sub>O, within the Measured and Indicated categories. This represents 69% of the total Mineral Resource Estimate.

Table 1- BP33 Mineral Resource Estimate summary

BP33 Mineral Resource Estimate Feb 2023 – 0.5% Li <sub>2</sub> O cut-off			
Resource Category	Tonnes (Mt)	Li <sub>2</sub> O %	Li <sub>2</sub> O Contained metal (kt)
Measured	2.85	1.46	42
Indicated	4.09	1.53	63
Inferred	3.17	1.45	46
<b>Total</b>	<b>10.1</b>	<b>1.48</b>	<b>151</b>

Note: Totals within this table are subject to rounding.

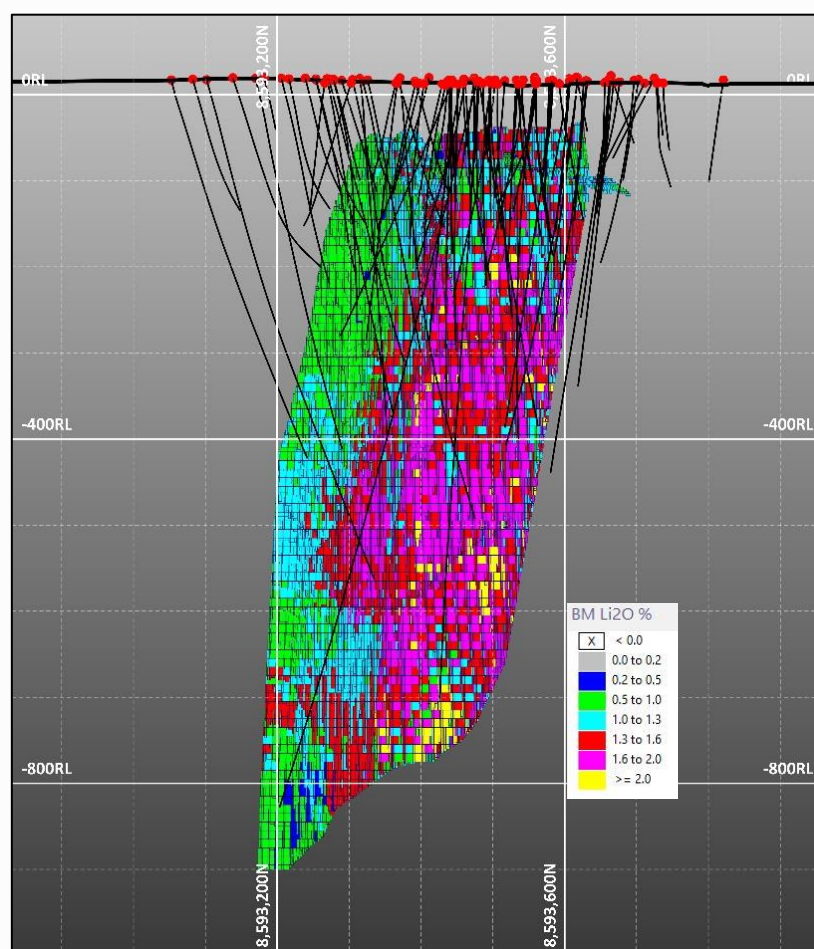


Figure 1 – Long sectional view of BP33 resource block model, coloured by Li<sub>2</sub>O% grade

The BP33 Mineral Resource Estimate represents the first update for prospects within the broader Finniss operations. Data from the 2022 drilling season is currently being incorporated into existing and new geological models with a view to reporting a global update to the Finniss Mineral Resource Estimate in Q4FY23.

## BP33 Final Drilling Results

Throughout 2022, a large deep diamond drilling program was undertaken at BP33. The results of which have been published previously (see ASX announcements "BP33 diamond drilling assays" on 5/10/2022, "Business Update: Finniss DSO shipment preparations, and BP33 diamond drilling results" on 27/09/2022 and "BP33 drilling delivers outstanding results" on 1/08/2022). This program resulted in significant intersections of mineralised pegmatite at significant depth below the previous mineral resource.

A program of RC drilling was subsequently undertaken that focussed on better defining the southern limits of the mineralisation as well as targeting along strike extensions. This drilling was completed late in 2022 with all assays now received and incorporated into the current Mineral Resource Estimate.

Significant intersections from the RC drilling are shown below with full drill hole data included in Table 2.

- 8m @ 0.63%  $\text{Li}_2\text{O}$  in FRC362 from 276m
- 3m @ 1.09%  $\text{Li}_2\text{O}$  in FRC363 from 290m

The results are in line with expectations as it has previously been recognised that the BP33 pegmatite and mineralisation thins to the south and decreases in grade. However, these RC drilling results have provide valuable information in helping to model this transition.

Table 2. Summary of final drill hole data and received assay results from exploration activities at the BP33 Project

Hole ID	Prospect	Drill Type	Easting (m)	Northing (m)	Dip	Azimuth	Total Depth (m)	From (m)	To (m)	Interval (m)	Grade (Li <sub>2</sub> O%)
FRC352	BP33	RC	694461	8593661	-65.75	132.64	240	142	143	1	0.90
FRC353	BP33	RC	694326	8593260	-65	88.08	288	No Significant Intercepts			
FRC354	BP33	RC	694291	8593215	-65.13	78.94	319	No Significant Intercepts			
FRC355	BP33	RC	694348	8593329	-60	90	150	No Significant Intercepts			
FRC356	BP33	RC	694378	8593298	-60	90	138	116	117	1	0.85
							<b>And</b>	125	128	3	0.57
FRC359	BP33	RC	694519	8593654	-55.05	119.94	240	No Significant Intercepts			
FRC360	BP33	RC	694356	8593759	-61.07	234.91	108	No Significant Intercepts			
FRC361	BP33	RC	694694	8593784	-63.53	300.73	246	No Significant Intercepts			
FRC362	BP33	RC	694307	8593371	-70.80	80.98	294	276	284	8	0.63
FRC363	BP33	RC	694319	8593336	-71.23	77.87	300	279	286	7	0.52
							<b>And</b>	290	293	3	1.09
FRC364	BP33	RC	694290	8593332	-70.80	76.45	300	No Significant Intercepts			

## Summary of Mineral Resource Estimate Reporting Criteria

As per ASX Listing Rules 5.8 and the 2012 JORC reporting guidelines, a summary of the material information used to estimate the Mineral Resource is detailed below.

### Geology and geological interpretation

The Lithium Deposits at the Finniss Lithium operation are hosted within rare element pegmatites of the broader 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. 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.

Mineralisation at BP33 is hosted within a dominant, large, sub vertical pegmatite body and a smaller sill like body on the northwestern side. Fresh pegmatite is composed of coarse-grained spodumene, quartz, albite, microcline and muscovite. Spodumene is the predominant lithium bearing phase. The BP33 pegmatite is interpreted to be approximately 350m in strike length and up to approximately 40m in true width. There is a very strong steep southerly plunge component with a depth extent currently in excess of 800m. In the north the body strikes towards 045° and dips steeply to the east. Approximately halfway along the body to the south the strike changes to due south and the body dips steeply to the west. The pegmatite body also thins in a southerly direction and the average grade of the mineralisation also decreases to the south.

### Sampling and sub-sampling

Pegmatite samples from RC drilling typically weighed 2-5kg and were collected on average over a 1m interval. RC samples were homogenised and subsampled by cone splitting at the drill rig.

Drill core was collected directly into trays, marked up by metre marks and secured as the drilling progressed. Core was cut firstly into half longitudinally along a consistent line, ensuring no bias in the cutting plane. Again, without bias, half core was then cut into two further segments. Depending on the hole, a half or quarter was then collected on a metre basis where possible but not less than 0.3m in length, determined by geological and lithological contacts. The majority of diamond core was sampled via half core.

### Drilling techniques and hole spacing

Reverse circulation (RC) and diamond core (DDH) drill techniques have been employed across the Finniss Lithium Project. RC Drilling was typically carried out with a 5 or 5.5 inch face-sampling bit. DDH drilling used a triple tube HQ technique with core usually oriented via a HQ core orientation tool. Diamond holes were either drilled from surface or utilised Mud Rotary or RC precollars with diamond tails.



Most holes have been drilled at angles of between 55 - 85° and approximately perpendicular to the strike of the pegmatite. Geological and assay data for all drill holes was used in the geological interpretation and MRE's with the exception of a single hole (FRC102) that was identified as being unreliable due to difficulties encountered whilst drilling.

Drillhole spacing varies within and for each deposit, reflecting the maturity and variability. At BP33, a drill spacing of approximately 20m by 20m is indicative of measured resources. Spacing increases for areas of Indicated mineral resources and for Inferred mineral resources a drill hole spacing in the range of 150m, supported by a strong down plunge component, has been used.

## Sample analysis method

RC samples were sent to North Australian Laboratories (NAL) in Pine Creek and more recently to Intertek (NTEL) in Darwin. DD samples were sent to either NAL, Intertek (Darwin) or Nagrom (Perth) for preparation and analysis. All samples underwent very similar sample preparation and analysis methods.

The samples were sorted and dried. Primary preparation involved crushing the whole sample. The samples were split to obtain a sub-fraction which has then been pulverised to 95% passing 100µm.

A sub-sample of the pulp was 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.

For the 2016-2017 drilling, all samples were analysed via the fusion method - a sub-sample was fused with a Sodium Peroxide Fusion flux and digested. ICP-OES was used for the analysis of the Li, P and Fe. Exhaustive checks of this data suggested an excellent correlation existed, therefore between 2018 and 2021, a 3000 ppm Li trigger was set to process that sample via the fusion method.

Since 2022, all samples have been processed at Intertek (NTEL) in Darwin via a Sodium Peroxide Fusion method in a Ni crucible with an ICPMS/OES finish for the following elements: Li, Al, B, Ba, Be, Ca, Cs, Fe, K, Mg, Mn, Nb, P, Rb, S, Sn, Sr, Ta, W, and As.

Selected drill core samples were also analysed for the following to provide a broader suite: Al, Ca, Mg, Mn, Si, LOI, SG (immersion), SG (pycnometer) and various trace elements.

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.

For the drilling undertaken by Liontown (Liontown Resources Ltd (ASX:LTR)), 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.

## Estimation methodology

Geology and mineralisation wireframes were generated in Micromine (V 2022.5) software using drill hole data from an Access database maintained by Core. Resource data was flagged with unique lithology and mineralisation domain codes as defined by the wireframes and composited to 1m lengths.

For the updated model at BP33, block model interpolation was undertaken using Ordinary Kriging (OK) and sub blocks were estimated at the parent block scale.

Grade continuity analysis for  $\text{Li}_2\text{O}$  was undertaken using Micromine software for the mineralised domains and models were generated in all three directions. These individual parameters were subsequently used in the block model estimation for each deposit.

At BP33, a block model with a parent block size of 5 x 10 x 10m with sub-blocks of 1.25 x 2.5 x 2.5m has been used to adequately represent the mineralised volume.

A review of the bulk density data was undertaken as part of this MRE update. Specific gravity (SG) determinations have been undertaken at NAL and Nagrom laboratories as well as by Core exploration personnel at its facilities in Berry Springs. Density data is consistent with expected values for fresh pegmatitic material. At BP33, where a significant amount of diamond drill core and data exists, a positive correlation between mineralised lithium grade and sample density was established. Specific Gravity (SG) is estimated into the block model via a  $\text{Li}_2\text{O}$  based regression equation, using the block grade estimates.

## Cut-off grades

The current Mineral Resource Inventory for BP33 has been reported at a cut-off grade of 0.5%  $\text{Li}_2\text{O}$ . This is reflective of the current positive environment around lithium pricing and the increased prospects for eventual economic extraction. Due to the robust nature and continuity of the mineralisation, supported by a relatively flat grade tonnage curve, changes in cut-off grade has little material impact on the Mineral Resource Estimate.

The cut-off grade contemplates all costs associated with the processing and selling of a  $\text{Li}_2\text{O}$  concentrate product and are all easily paid for by the 0.5%  $\text{Li}_2\text{O}$  cut-off.

No top cuts were warranted or applied.

## Classification criteria

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

Measured Mineral Resources have been defined at BP33. Measured Mineral Resources are in areas supported by high data density and excellent geological and grade continuity. These areas could support detailed mine planning activities and are predominantly blocks populated during the first interpolation run.



Indicated Mineral Resources have been defined at BP33. This is in areas that have a lower level of data density and/or lower confidence in the geological and grade continuity. However, enough confidence remains to be able to support the application of modifying factors to support mine planning and the evaluation of economic viability.

Inferred Mineral Resources at BP33 have been identified in the deeper parts of the resources and/or in areas with low data density and lower levels of confidence in the geology, mineralisation, and resource estimation.

The classifications reflect the view of the Competent Persons.

## Mining Method Selection

The mining method currently under consideration for the BP33 deposit is up hole retreat mining. Internal pillars are utilised for overall stability. The ore body width, vertical orientation, and competent host rock ground conditions and internal rock pillars allows for up hole retreat mining without back fill to be utilised as a viable low-cost mining method.

It is assumed that a contract mining company will be used, and their equipment hire fleet would be utilised.

Mining Infrastructure required to support the mine plan has been considered, including waste rock dumps, ROM pad, haul roads, crusher and processing plant, tailings storage facility, explosives storage facility, water storage, workshops and other buildings required for a contract mining operation.

## Processing Method

For Lithium ore processing comprises a gravity method called dense media separation (DMS) of the 0.5mm to 6.3mm fraction after P100 crushing to 6.3mm. The rejects will be stockpiled for possible future use. The minus 0.5mm fines are to be placed in a purpose-built tailings storage facility (TSF). Multiple generations of metallurgical test work were used to arrive at the final process flowsheet. The introduction of a re-crush facility on DMS middlings was key to consistently producing grades of 5.5% or better at acceptable recoveries of over 70%. This necessitated a primary and secondary DMS circuit on the coarser +2mm fraction, so that the secondary coarse DMS floats could be re-crushed and recycled.

Separating the -2mm +0.5mm fines and incorporating a separate fines DMS circuit was considered to be necessary to ensure the plant design was sufficiently robust to cater for any unexpected variability in the ore body.

## 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 Resources.

# JORC Code, 2012 Edition – Table 1 Report

## Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
SAMPLING TECHNIQUES	<ul style="list-style-type: none"> <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)</li> </ul>	<ul style="list-style-type: none"> <li>Drilling geology, assays and resource estimation results reported herein relate to reverse circulation (RC) and diamond drillhole (DDH) drilling employed by Core Lithium Ltd (CXO) and Lontown Resources Ltd (LTR) at BP33, over the period late 2016 to late 2022 (refer to "Drill hole information" section below).</li> <li>RC drill spoils over all programs were collected into two sub-samples: <ul style="list-style-type: none"> <li>1 metre split sample homogenised 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 assaying was done on a 1 metre basis. Sampling continued into the barren wall-zone adjacent to the pegmatite for up to 4m.</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>

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	may warrant disclosure of detailed information.	<ul style="list-style-type: none"> <li>Drill core was collected directly into trays, marked up by metre marks and secured as the drilling progressed. Geological logging and sample interval selection took place soon after.</li> <li>DDH Core was transported to a local core preparation facility where geological logging and sample interval selection took place. Core was cut into half longitudinally along a consistent line between 0.3m and 1m in length, ensuring no bias in the cutting plane.</li> <li>DDH sampling of pegmatite for assays is done over the sub-1m intervals described above. 1m-sampling continued into the barren phyllite host rock.</li> </ul>
DRILLING TECHNIQUES	<ul style="list-style-type: none"> <li>Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>RC Drilling was carried out with 5 to 5.5 inch face-sampling bit.</li> <li>DDH drilling used a triple tube HQ technique. Core was oriented using a Reflex HQ core orientation tool.</li> <li>Diamond Core Drilling (DDH) was undertaken using standard HQ core assembly (triple tube), drilling muds or water as required, and a wireline setup. Holes were either cored from surface or precollared by mud rotary down to rigid bedrock (~60m) or by RC down to a depth just above the target pegmatite.</li> </ul>
DRILL SAMPLE RECOVERY	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>RC drill recoveries were visually estimated from volume of sample recovered. The majority of sample recoveries reported were dry and above 90% of expected.</li> <li>RC samples were visually checked for recovery, moisture and contamination and notes made in the logs.</li> <li>The rigs splitter was emptied between 1m samples. A gate mechanism on the cyclone 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.</li> <li>Drill collars are sealed to prevent sample loss and holes are normally drilled dry to prevent poor recoveries and contamination caused by</li> </ul>

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		<p>water ingress. Wet intervals are noted in case of unusual results.</p> <ul style="list-style-type: none"> <li>DDH core recoveries were measured using conventional procedures utilising the driller's markers and estimates of core loss, followed by mark up and measuring of recovered core by the geologist or geotechnician.</li> <li>DDH core recovery is 100% in the pegmatite zones and in fresh host-rock.</li> <li>Studies have shown that there is no sample bias due to preferential loss/gain of the fine or coarse material.</li> </ul>
LOGGING	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Detailed geological logging was carried out on all RC and DDH drill holes. The geological data is suitable for inclusion in a Mineral Resource Estimate (MRE).</li> <li>Logging recorded lithology, mineralogy, mineralisation, weathering, colour, and other sample features.</li> <li>RC chips are stored in plastic RC chip trays.</li> <li>DDH core is stored in plastic core trays.</li> <li>All holes were logged in full, including RC precollars. Mud rotary precollars were only logged if weathered pegmatite was expected.</li> <li>Pegmatite sections are also checked under a UV light for spodumene identification on an ad hoc basis. This provides indicative qualitative information.</li> <li>RC chip trays and DDH core trays are photographed and stored on the CXO server.</li> <li>Geotechnical logging was carried out on the oriented DDH core. Selected holes were also logged using downhole tools, collecting a variety of information for geotechnical purposes.</li> </ul>
SUB-SAMPLING TECHNIQUES AND SAMPLE PREPARATION	<ul style="list-style-type: none"> <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</li> </ul>	<ul style="list-style-type: none"> <li>The majority of the mineralised samples were collected dry, as noted in the drill logs and database.</li> <li>The field sample preparation for CXO drilling involved collection of RC samples from the cone splitter on the drill rig into a calico bag</li> </ul>

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	<p>dry.</p> <ul style="list-style-type: none"> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<p>for dispatch to the laboratory.</p> <ul style="list-style-type: none"> <li>LTR samples were collected as 1m riffle split samples from the rig into calico bags. Composite samples were obtained via a scoop from the primary piles on the ground.</li> <li>The sample sizes are considered more than adequate to ensure that there are no particle size effects relating to the grain size of the mineralisation.</li> <li>Quarter or Half Drill Core sample intervals were constrained by geology, alteration or structural boundaries, intervals varied between a minimum of 0.3 metres to a maximum of 1 m. The core is cut along a regular Ori line to ensure no sampling bias.</li> <li>A field duplicate sample regime is used to monitor sampling methodology and homogeneity of RC drilling at Finniss. The typical procedure was to collect Duplicates via a spear of the green RC bag, having collected the Original in a calico bag. Throughout 2022, all dulpicates were collected as original splits directly from the cyclone.</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 two methodologies used to derive the laboratory sample.</li> </ul> <p><b>Sample preparation</b></p> <p><b>CXO drilling</b></p> <ul style="list-style-type: none"> <li>Prior to 2022, sample prep occurred at North Australian Laboratories ("NAL"), Pine Creek (NT)</li> <li>Some DDH sample prep also occurred at Nagrom Laboratory in Perth (WA).</li> <li>Since 2022, sample prep occurred at Intertek (NTEL) In Darwin.</li> <li>DDH samples are crushed to a nominal size to fit into mills, approximately -2mm. RC samples do not require any crushing, as they are largely pulp already.</li> </ul>

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
<p>QUALITY OF ASSAY DATA AND LABORATORY TESTS</p>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>A 1-2 kg riffle-split of RC Samples are then prepared by pulverising to 95% passing -100 um.</li> <li>In 2017, CXO's samples were pulverised in a Kegormill. In mid-2017, Steel Ring Mills were installed at NAL to reduce the iron contamination that was recognised in the 2017 Drilling program.</li> </ul> <p><b>LTR drilling</b></p> <ul style="list-style-type: none"> <li>Sample prep occurred at ALS in Perth (WA).</li> <li>RC Samples were rifle split to a max of 3kg and then prepared by pulverising to 85% passing -75 um. This took place in an LM5 ring mill.</li> </ul> <p><b>CXO drilling</b></p> <ul style="list-style-type: none"> <li>Prior to 2022, sample analysis for RC and routine DDH samples occurred at North Australian Laboratories, Pine Creek, NT.</li> <li>Since 2022, sample analysis occurred at Intertek (NTEL) In Darwin.</li> <li>At NAL, 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, S and Fe. The lower and upper detection range for Li by this method is 1 ppm to 5000 ppm.</li> <li>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 to 20,000 ppm.</li> <li>Since 2022, all samples have been processed at Intertek (NTEL) in Darwin via a Sodium Peroxide Fusion method in a Ni crucible with an ICPMS/OES finish for the following elements: Li, Al, B, Ba, Be, Ca, Cs, Fe, K, Mg, Mn, Nb, P, Rb, S, Sn, Sr, Ta, W, and As.</li> <li>Selected drillholes were also assayed for a full suite of elements, including REEs and gold.</li> </ul>



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		<ul style="list-style-type: none"> <li>A barren flush is inserted between samples at the laboratory.</li> <li>Laboratories utilise standard internal quality control measures including Certified Lithium Standards and duplicates/repeats.</li> <li>Approximate CXO-implemented quality control procedures include: <ul style="list-style-type: none"> <li>One in 20 certified Lithium ore standards were used for this drilling.</li> <li>One in 20 duplicates were used for the RC drilling program.</li> <li>One in 20 blanks were inserted for this drilling.</li> </ul> </li> <li>CXO runs regular Umpire analysis and has found excellent agreement. Generally, a small under-reporting at NAL with respect to Umpire Lab implies that assay data used for the MRE are slightly conservative.</li> <li>There were no significant issues identified with any of the QAQC data.</li> </ul> <p><b>LTR drilling</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul>
VERIFICATION OF SAMPLING AND ASSAYING	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Senior technical personnel have visually inspected and verified the significant drill intersections.</li> <li>Twinned holes at BP33 intersect within 10m of each other and can be used to assess heterogeneity at this scale. Results are consistent.</li> <li>All field data was initially entered into excel spreadsheets (supported by lookup tables) and more recently directly into the OCRIS logging system (supported by look-up/validation tables) at site and imported into the centralised CXO Access database.</li> <li>LTR data had a similar origin and has been subsequently validated by CXO before importation into CXO's database. Some lithology codes were rationalised in this process.</li> <li>Hard copies of survey and sampling data are stored in the local</li> </ul>

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
LOCATION OF DATA POINTS	<ul style="list-style-type: none"> <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>	<p>office and electronic data is stored on the CXO server.</p> <ul style="list-style-type: none"> <li>• Metallic Lithium percent was multiplied by a conversion factor of 2.1527/10000 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> <ul style="list-style-type: none"> <li>• Differential GPS has been used to determine all collar locations, including RL. 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 the earlier CXO holes were surveyed with a digital camera.</li> <li>• Drill hole deviation has been minor and predictable in the most part. However, for the deeper holes, deviation was significant in the lower parts of the holes as a result of hard bedrock. Despite this, the holes still tested targets roughly oblique to the strike of the pegmatite, and acceptable for resource drilling. In any case, the gyro down hole survey has accurately recorded the drill traces and any deviation from the planned program can be accommodated in a 3D GIS environment.</li> <li>• The local topographic surface used in the MRE was generated from digital terrain models collected by CXO. This DTM is used to generate the RL of collars for which there was DGPS data. Cross-checking by CXO against DGPS control points indicates that this DTM-derived RL is within 1m of the true RL.</li> </ul>

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
DATA SPACING AND DISTRIBUTION	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Drill spacing is illustrated in figures within the release. Drillhole spacing varies within the deposit. At BP33 drill spacing of 20m by 20m (or better) is indicative of measured resources. Areas of indicated and inferred mineral resources will often have drill hole spacing greater than this and up to 150m, supported by a strong down plunge continuity. Further details are provided in the “Estimation and modelling techniques” section below.</li> <li>At BP33, the mineralisation and geology show very good continuity from hole to hole and is sufficient to support the definition of a Mineral Resource and the classifications contained in the JORC Code (2012 Edition).</li> <li>All RC intervals are 1m. All DDH mineralised intervals reported are based on a maximum of one metre sample interval, with local intervals down to 0.3m.</li> </ul>
ORIENTATION OF DATA IN RELATION TO GEOLOGICAL STRUCTURE	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Drilling is oriented approximately perpendicular to the interpreted strike of mineralisation (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>No sampling bias is believed to have been introduced.</li> </ul>
SAMPLE SECURITY	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Sample security was managed by the CXO. After preparation in the field or CXO's warehouse, 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.</li> </ul>
AUDITS OR REVIEWS	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No audits or reviews of the data associated with this drilling have occurred.</li> </ul>

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		<ul style="list-style-type: none"> <li>Ongoing QAQC and validation of the data has been excellent, and no specific audits or reviews are considered necessary.</li> </ul>

## 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"> <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 style="list-style-type: none"> <li>The Finnis Lithium Project covers an area of over 500 km<sup>2</sup>. BP33 is located on the boundary between EL29698 and EL30015, and covered by ML32346.</li> <li>EL's and ML's are 100% owned by CXO.</li> <li>The project area comprises predominantly Vacant Crown land and to a lesser extent Crown Leases (perpetual and term) as well as minor Freehold private land.</li> <li>Across the tenure there are known Aboriginal sacred sites as well as archaeological and heritage sites. All are avoided.</li> <li>The tenements are in good standing with the NT DPIR Titles Division.</li> </ul>
EXPLORATION DONE BY OTHER PARTIES	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <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 identified.</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>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 with Barbara Mining Corporation.</li> <li>Greenex (the exploration arm of Greenbushes Tin Ltd) explored the Bynoe pegmatite field between 1980 and 1990 and produced tin and tantalite from its Observation Hill</li> </ul>

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		<p>Treatment Plant between 1986 and 1988.</p> <ul style="list-style-type: none"> <li>• They then tributed the project out to a company named Fieldcorp Pty Ltd who operated it between 1991 and 1995.</li> <li>• In 1996, Julia Corp drilled RC holes into representative pegmatites in the field, but like all their predecessors, did not assay for Li.</li> <li>• Since 1996 the field remained dormant 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 RC holes testing for lithium potential at BP33, Hang Gong and Booths in 2016.</li> <li>• CXO subsequently drilled BP33, Grants, Far West, Central, Ah Hoy and several other prospects in 2016.</li> <li>• After purchase of the LTR tenements in 2017, CXO drilled Lees, Booths, Carlton and Hang Gong.</li> <li>• Late in 2021, Core commenced development of the Grants Mineral Resource with first ore mined and crushed late in 2022.</li> </ul>
GEOLOGY	<ul style="list-style-type: none"> <li>• Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>• The project area covers a swarm of complex zoned rare element pegmatites, which comprise the 55km long by 10km wide Bynoe Pegmatite Field (NTGS Report 16).</li> <li>• The Finniss pegmatites have intruded early Proterozoic shales, siltstones and schists of the Burrell Creek Formation which lies on the northwest margin of the Pine Creek Geosyncline. To the south and west are 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</li> </ul>



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		<p>of 5-10 km.</p> <ul style="list-style-type: none"> <li>Fresh pegmatite is composed of coarse-grained spodumene, quartz, albite, microcline and muscovite. Spodumene, a lithium bearing pyroxene (<math>\text{LiAl}(\text{SiO}_3)_2</math>), is the predominant lithium bearing phase and displays a diagnostic red-pink UV fluorescence. The pegmatite bodies can be weakly zoned, usually with a thin (1-2m) quartz-mica-albite wall facies and rare barren internal quartz veins.</li> <li>Mineralisation is typically hosted within large, massive, sub vertical pegmatite bodies. It can also be present within shallow to moderately dipping stacked pegmatite bodies or sheets.</li> </ul>
DRILL HOLE INFORMATION	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>A summary of all new exploration results reported as part of this release is contained within the body of the release.</li> <li>A summary of material information for all other drill holes used as part of the Mineral Resource Estimates have been released and documented previously between 2016 and 2022. This includes all collar locations, hole depths, dip and azimuth as well as assay or intercept information.</li> <li>No drilling or assay information has been excluded.</li> </ul>
DATA AGGREGATION METHODS	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>Any sample compositing reported 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.</li> </ul>

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	<ul style="list-style-type: none"> <li>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>0.4% Li<sub>2</sub>O 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).</li> <li>No metal equivalent values have been used or reported.</li> </ul>
RELATIONSHIP BETWEEN MINERALISATION WIDTHS AND INTERCEPT LENGTHS	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>All holes have been drilled at angles of between 60 - 85° and approximately perpendicular to the strike of the pegmatite.</li> <li>Some holes deviated in azimuth and therefore are marginally oblique in a strike sense.</li> <li>Based on rough assessment of drill sections, true width represents about 50-70% of the intercept width.</li> </ul>
DIAGRAMS	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>Refer to Figures and Tables in the release.</li> </ul>
BALANCED REPORTING	<ul style="list-style-type: none"> <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 avoiding misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>All drilling results for BP33 have been reported.</li> </ul>
OTHER SUBSTANTIVE EXPLORATION DATA	<ul style="list-style-type: none"> <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 – size and</li> </ul>	<ul style="list-style-type: none"> <li>All meaningful and material data has previously been reported.</li> </ul>

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
FURTHER WORK	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Currently, no further drilling from surface is planned for BP33.</li> <li>It is expected that once underground mining has commenced that further evaluation of the deeper parts of the resource will be evaluated from underground positions.</li> </ul>

## Section 3 Estimation and Reporting of Mineral Resources

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

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
DATABASE INTEGRITY	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>A data check of source assay data and survey data has been undertaken and compared to the database. No translation issues have been identified. The data was validated during the interpretation of the mineralisation, with no significant errors identified. Only RC and DDH holes have been included in the MRE.</li> <li>Data validation processes are in place and run upon import into Micromine to be used for the MRE. Checks included: missing intervals, overlapping intervals and any depth errors.</li> <li>A DEM topography to DGPS collar check has been completed.</li> </ul>
SITE VISITS	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Graeme McDonald (CP) has undertaken multiple site visits while drilling activities have been underway between November 2017 and November 2022. A review of the drilling, logging, sampling and QAQC procedures has been undertaken with no significant or material issues identified. Processes were found to be of a high standard.</li> </ul>
GEOLOGICAL INTERPRETATION	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>The geological interpretations are considered robust due to the nature of the relationships between the geology and mineralisation. The mineralisation is hosted within the pegmatites. The locations of the hangingwall and footwall of the pegmatite intrusions are well understood with drilling which penetrates both contacts.</li> <li>Diamond drill core and reverse circulation drill holes have been used in the MRE where available for each deposit. Lithology, structure, alteration and mineralisation data has been used to generate the mineralisation models. The primary assumption is that the mineralisation is hosted within structurally controlled pegmatite, which is considered robust. Additional surface exposure within the historic pit helps to constrain the pegmatite contacts. Older BEC series RC drill holes were not considered as they were often shallow,</li> </ul>

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		<p>poorly located and were not assayed for Li.</p> <ul style="list-style-type: none"> <li>Due to the relatively close spaced nature of the drilling data and the observed geological continuity, no alternative interpretations have been considered.</li> <li>The mineralisation interpretations are based on a nominal lithium cut-off grade of 0.3% Li<sub>2</sub>O, hosted within the pegmatites.</li> <li>At BP33 a dominant sub-vertical host pegmatite is considered to be continuous over the length of the deposit. The pegmatites pinch and swell along their length. At BP33, a smaller pegmatite sill like body was identified and modelled and contributes to the MRE.</li> <li>Generally, the pegmatite displays a non-mineralised wall rock phase of 1-2m thickness and some internal quartz rich zones.</li> </ul>
DIMENSIONS	<ul style="list-style-type: none"> <li>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.</li> </ul>	<p><b>BP33</b></p> <ul style="list-style-type: none"> <li>The lithium is hosted within two primary zones of mineralised pegmatite over a combined strike of 360m. The pegmatite averages 20-30m in true width and displays a variable strike orientation from north to northeast.</li> <li>The BP33 pegmatite is approximately 350m in strike length and up to approximately 40m in true width. There is a very strong steep southerly plunge component with a depth extent currently in excess of 800m. In the north the body strikes towards 045° and dips steeply to the east. Approximately halfway along the body to the south the strike changes to due south and the body dips steeply to the west. The pegmatite body also thins in a southerly direction and the average grade of the mineralisation also decreases to the south.</li> <li>The pegmatite is deeply weathered to depths of approximately 50m below surface.</li> </ul>
ESTIMATION AND MODELLING TECHNIQUES	<ul style="list-style-type: none"> <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</li> </ul>	<ul style="list-style-type: none"> <li>At BP33, grade estimation of lithium was completed using Ordinary Kriging (OK) into mineralised and unmineralised pegmatite domains using Micromine software. Variography was undertaken on the grade domain composite data. Variogram orientations are largely controlled by the strike and dip of the mineralisation. Grade domains within the main pegmatite body have been estimated</li> </ul>

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	<p>was chosen include a description of computer software and parameters used.</p> <ul style="list-style-type: none"> <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> <li>• The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<p>using soft boundaries. All other boundaries are considered hard.</p> <ul style="list-style-type: none"> <li>• A check estimate using an alternative estimation technique (ID2) was also been undertaken. No issues were identified.</li> <li>• No assumptions have been made regarding recovery of any by-products.</li> <li>• Fe is considered to be a deleterious element. However, it is known that Fe contamination exists in the assayed samples due to the use of steel drill rods, bits and steel milling equipment. By comparing RC and DD assays as well as data from blanks and check assays undertaken at an independent umpire laboratory using non-steel-based tungsten carbide mills, the level of contamination was shown to be both substantial and highly variable and difficult to correct. For this reason, Fe has not been estimated as it is known that the raw data is contaminated and will therefore result in an estimate that is misleading. No other deleterious elements have been considered and therefore estimated for this deposit.</li> <li>• A parent block size of 5 m (X) by 10 m (Y) by 10 m (Z) with a sub-block size of 1.25 m (X) by 2.5 m (Y) by 2.5 m (Z) has been used to define the mineralisation, with the lithium estimated at the parent block scale.             <ul style="list-style-type: none"> <li>◦ Pass 1 estimation has been undertaken using a minimum of 4 and a maximum of 16 samples into a search ellipse with a radius of 50m, with samples from a minimum of two drill holes. Approximately 32% of blocks were estimated during this run.</li> <li>◦ Pass 2 estimation has been undertaken using a minimum of 4 and a maximum of 16 samples into a search ellipse with a radius of 100m, with samples from a minimum of two drill holes. Approximately 31% of blocks were estimated during this run.</li> <li>◦ Pass 3 estimation has been undertaken using a minimum of 4 and a maximum of 16 samples into a search ellipse with a radius of 200m, with samples from a minimum of two drill holes. Approximately 37% of blocks were estimated during</li> </ul> </li> </ul>



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		<p>this run.</p> <ul style="list-style-type: none"> <li>No selective mining units are assumed in the estimates.</li> <li>Lithium only has been estimated within the lithium mineralised domains and non-mineralised waste pegmatite domains.</li> <li>The mineralisation and geological wireframes have been used to flag the drill hole intercepts in the drill hole assay files. The flagged intercepts have then been used to create composites in Micromine. The composite length is 1 m in all data for all deposits.</li> <li>The influence of extreme sample distribution outliers in the composited data has been determined using a combination of histograms and log probability plots. It was decided that no top-cuts need to be applied.</li> <li>Model validation has been carried out, including visual comparison between composites and estimated blocks; check for negative or absent grades; statistical comparison against the input drill hole data and graphical plots.</li> </ul>
MOISTURE	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>The tonnes have been estimated on a dry basis.</li> </ul>
CUT-OFF PARAMETERS	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>The current Mineral Resource Estimate has been reported at a cut-off grade of 0.5% Li<sub>2</sub>O. This is reflective of the current positive environment around lithium pricing and the increased prospects for eventual economic extraction.</li> <li>No top cuts were warranted or applied.</li> </ul>
MINING FACTORS OR ASSUMPTIONS	<ul style="list-style-type: none"> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources</li> </ul>	<ul style="list-style-type: none"> <li>Due to the depth extent and size as well as the grade and continuity of mineralisation, it is considered that underground mining methods will be used at BP33.</li> <li>It is assumed that the material mined will be processed at the Grants processing facility nearby.</li> <li>No other assumptions have been made.</li> </ul>

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	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	<ul style="list-style-type: none"> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>No metallurgical recoveries have been applied to the Mineral Resource Estimates.</li> <li>A significant amount of metallurgical test work has been undertaken at BP33.</li> <li>A simple DMS (gravity) process has been shown to produce a high-quality lithium product.</li> <li>An approximate 6% Li<sub>2</sub>O (SC6) concentrate is produced with low &lt;0.7% iron and low moisture at a high 70% recovery.</li> </ul>
ENVIRONMENTAL FACTORS OR ASSUMPTIONS	<ul style="list-style-type: none"> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>Mine Management Plan (MMP) for the Finnis Lithium Project development at Grants has been approved by the Northern Territory Government.</li> <li>This includes approvals for Waste Rock Dump (WRD) and tailings storage facilities.</li> <li>Environmental approvals have also been received for the BP33 underground development with a MMP currently being assessed.</li> </ul>
BULK DENSITY	<ul style="list-style-type: none"> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency</li> </ul>	<ul style="list-style-type: none"> <li>Specific gravity (SG) determinations have been undertaken at NAL and Nagrom laboratories on RC and diamond drill core from BP33 as well as by Core exploration personnel at its facilities in Berry Springs.</li> </ul>

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	<p>of the measurements, the nature, size and representativeness of the samples.</p> <ul style="list-style-type: none"> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul style="list-style-type: none"> <li>Methods used by the laboratories include water immersion and wet pycnometry at NAL and gas pycnometry at Nagrom. The method used by Core was classic water immersion of randomly selected samples from each metre of drilled pegmatite.</li> <li>In excess of 1,000 SG determinations have been done across multiple deposits at the Finniss Lithium Project.</li> <li>Density data is consistent with expected values for fresh pegmatitic material. At BP33, a significant amount of diamond drill core and data exists, a positive correlation between mineralised lithium grade and sample density was established. Specific Gravity (SG) is estimated into the block model via a <math>\text{Li}_2\text{O}</math> based regression equation, using the block grade estimates.</li> <li>At BP33 the regression equation used is <math>\text{SG} = 0.05 \times \text{Li}_2\text{O}\% + 2.65</math></li> </ul>
CLASSIFICATION	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 considers the relative contributions of geological and data quality and confidence, as well as grade confidence and continuity.</li> <li>Confidence in the Measured and Indicated mineral resource is sufficient to allow application of modifying factors within a technical and economic study.</li> <li>The classification reflects the view of the Competent Person.</li> </ul>
AUDITS OR REVIEWS	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul style="list-style-type: none"> <li>There have been no audits or reviews of the current Mineral Resource estimate.</li> <li>Previous Mineral Resource estimates for BP33 and Carlton have been subjected to an Independent Mineral Resource and Model Review and Assessment by an external party.</li> <li>No material issues were found at the time that would impact the global tonnes and grade estimated at the deposits.</li> <li>The methodology and processes used throughout the current Mineral Resource updates are considered to be robust and the same as used previously.</li> </ul>

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
DISCUSSION OF RELATIVE ACCURACY/CONFIDENCE	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>If any audits or reviews were undertaken no significant issues would be expected.</li> <li>The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code.</li> <li>The statement relates to global estimates of tonnes and grade.</li> </ul>