



ASX: CXO ANNOUNCEMENT

1 March 2019

New Spodumene Pegmatite Body Discovered at Carlton

HIGHLIGHTS

1

- New "western" spodumene pegmatite body discovered only 15m west of the currently defined orebody at Carlton;
- Recent diamond drilling intersects 26m of pegmatite adjacent to the Carlton orebody;
- New pegmatite body contains high-quality spodumene mineralisation similar to the nearby Grants and BP33 lithium orebodies;
- Cumulative 52.7m downhole intersection at Carlton, including the two Carlton pegmatites in drill hole NMRD003;
- New Mineral Resource update from Carlton expected next week; and
- Drill assays from recent diamond drilling at Carlton to be received in the next 4-6 weeks.

Emerging Australian lithium developer, Core Lithium Ltd (ASX: CXO) ("**Core**" or the "**Company**"), is pleased to announce that a new spodumene pegmatite body has been discovered adjacent to the current Carlton Lithium Mineral Resource, which is a component of the Company's wholly-owned Finniss Lithium Project ("**Finniss**"), located near Darwin in the Northern Territory.

In addition to the expected 27m pegmatite intersection of the Carlton orebody, recently completed diamond drilling at the deposit unexpectedly intersected another 26m intersection of spodumene pegmatite just 15m to the west of the currently defined Mineral Resource (Figures 1 and 2).







Figure 1. New spodumene pegmatite intersected adjacent west of the Carlton Ore body

To date, most of the drilling at Carlton has been from the east (Figures 1 & 3), and as this pegmatite body had not been previously recognised, the previous up-dip drill holes of the new intersection ended before they could potentially intersect the interpreted shallow extensions of this new spodumene pegmatite body (Figure 1).

The new western pegmatite has not been intersected along strike yet in other drill holes at Carlton, so additional drilling is planned at Carlton to test extension of this newly discovered pegmatite as well as further resource drilling early in the 2019 field (dry) season mid-Q2 2019.

2





The spodumene pegmatite in the Carlton "western pegmatite" is visually quite similar to the high-quality spodumene mineralisation observed nearby at the Grants and BP33 lithium Mineral Resources (Figures 2 and 4).

The Carlton deposit is located approximately 1km southeast of the Grants ore body and conveniently on the same recently granted Mineral Lease. A number of potential operational synergies and efficiencies may be gained from development of the nearby orebodies.



Figure 2. Spodumene pegmatite drill core from the new "western pegmatite" found at Carlton.

Core is currently completing a Mineral Resource update for Carlton ahead of finalising the Definitive Feasibility Study (**DFS**) toward the end of March 2019. Core anticipates further increases to the Mineral Resource at Carlton as a result of this new intersection in the future. However, due to the time required to process and cut the new core and receive assays, this additional newly identified spodumene pegmatite body is not planned to be included in the initial DFS findings.

The Finniss Project comprises over 500km² of granted tenements over the Bynoe Pegmatite Field, near Darwin. Exploration and Resource drilling to date have confirmed that potential ore-grade lithium mineralisation is widespread within the Finniss Project, and Core's drilling in 2018 and into early 2019 has the potential to substantially grow the Mineral Resource base to underpin a potential long-life lithium mining and production operation.





Core is planning to be the next lithium producer in Australia through mining and production of high-quality lithium concentrate from the Finniss Project and is aiming to complete a DFS, regulatory approvals, financing and internal approvals before commencing construction later this year.

The Finniss Project has substantial infrastructure advantages supporting the Project's development; being close to grid power, gas and rail and within easy trucking distance by sealed road to Darwin Port - Australia's nearest port to Asia.

Commenting on the excellent exploration results, Core Managing Director, Stephen Biggins said:

"Core's new discovery of high-quality spodumene pegmatite at Carlton illustrates the huge potential to substantially add to our lithium resources within our dominant 500km² tenement position over the Bynoe Pegmatite Field.

"Greenbushes did a great job in finding hundreds of pegmatites in the area in the 1980's and 1990's whilst they mined the field for tin and tantalum, but they did not test this area at all for its lithium potential.

"Core is confident, based on past success, that the high-quality lithium resource base of the project will continue to grow over time adjacent to the best logistics pathway to Asia – these fundamental project advantages will be increasingly valued as the global lithium market continues to grow and mature.

"With a DFS focussed on producing spodumene concentrate to be completed shortly, along with the key recommendation to proceed with development, I'm sure one of the outcomes will be for Core to consider future downstream processing to lithium hydroxide at Middle Arm in the context of a growing Mineral Resource."

For further information please contact:

Stephen Biggins Managing Director Core Lithium Ltd +61 8 8317 1700 info@corelithium.com.au

For Media and Broker queries:

Andrew Rowell Director - Investor Relations Cannings Purple +61 400 466 226 arowell@canningspurple.com.au







Figure 3. Carlton drill hole location plan with existing pit outline shown in green.













Hole_ID	Drill_Type	Easting	Northing	RL	Azimuth	Dip	Total_Depth	Cumulative Peg
								Interval
NRC094	RC	693775	8597986	24.13	101	-61	91	25
NRC095	RC	693772	8597921	23.93	98	-58	91	54
NRC096	RC	693903	8598033	22.02	283	-60	139	4
NRC097	RC	693913	8597953	22.77	282.51	-71.65	234	17
NRC098	RC	693803	8597760	27.28	279.56	-60.63	133	0
NRC099	RC	693905	8597869	23.72	268.86	-60.35	175	9
NRC100	RC	693937	8597907	22.49	265	-55	120	17
NRC107	RC	693928	8597951	23	268	-60	208	12
NMRD003	DDH	693903	8597787	23	280.97	-66.3	278.7	52.7
NRCD001	DDH	693897	8597848	23	279.8	-65.16	247.7	26.3
NRCD002	DDH	693923	8597893	23	278.82	-64.86	245.9	24.6

Table 1 Recent pegmatite drill intersections at Carlton, Finniss Lithium Project

Competent Persons Statements

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

Core confirms that it is not aware of any new information or data that materially affects the information included in this announcement. Exploration results reported in this announcement have previously been reported by Core in the announcements "High-Grade Lithium Intersected in New Spodumene Pegmatites" on 5 February 2018, "New Exploration Intersections Add to Finniss Potential" on 16 August 2018 and "Carlton and Hang Gong to Boost Finniss Resource Base" on 27 November 2018.

7





JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	 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. 	 Reverse circulation (RC) and diamond core (DDH) drill techniques have been employed for the Core Lithium Ltd ("Core" or "CXO") at Carlton, from late 2018 to mid-February 2019. A list of the 13 hole IDs and positions can be found in the "Drill hole information" section below. RC drill spoils over all programs were collected into two sub-samples: 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. Drill core is collected for each ~3m run and laid in core trays to be marked up. Assay results not discussed in this report.
Drilling techniques	• 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).	• Drilling techniques were RC and DDH. Drilling was carried out by Geo Drilling (Bachelor NT; Schram 450 RC with 5-inch bit), and WDA Drilling (Humpty Doo NT; Alton 1200 track-mounted DDH using HQ rods and wireline triple tube).

1	С	()	F	2	Ε
	LI	Т	Н	I	U	M



Criteria	JORC Code explanation	Commentary
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	 RC drill recoveries were visually estimated from volume of sample recovered. The majority of sample recoveries reported were above 90% of expected. 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. DDH core recovery is 100% in the pegmatite zones, but in the top 50m is diminished by the weathered ground. An RC or Mud Rotary precollar is used to overcome collar issues. Assay results not discussed in this report.
Logging	 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. 	 Detailed geological logging was carried out on all RC and DDH drill holes. Logging recorded lithology, mineralogy, mineralisation, weathering, colour, and other sample features. RC chips are stored in plastic RC chip trays. DDH core is kept in HQ trays. All holes were logged in full, including the precollars of the DDH holes. Pegmatite sections are also checked under a single-beam UV light for spodumene identification on an ad hoc basis. These only provide indicative





Criteria	JORC Code explanation	Commentary
		 qualitative information. RC chip trays and DDH core trays are photographed and stored on the CXO server.
Sub-sampling techniques and sample preparation	 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. 	Assay results not discussed in this report.
Quality of assay data and laboratory tests	 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, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	Assay results not discussed in this report.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. 	Assay results not discussed in this report.





Criteria	JORC Code explanation	Commentary
	 Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	
Location of data points	 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. 	 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. 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. A small number of CXO holes were surveyed with a Pathfinder digital camera. The local topographic surface is used to generate the RL of most of the collars, given the large errors obtained by GPS. The RL of some of the holes was via estimation, which is accurate to within 1m given the low relief of the prospect area and abundance of well constrained RL data.
Data spacing and distribution	 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 classifications applied. Whether sample compositing has been applied. 	 The nominal drill hole spacing is 40 metres between drill sections. The majority of sections have had more than one hole drilled. The drill intercept spacing down dip is roughly 40m. The mineralisation and geology show very good continuity from hole to hole and will be sufficient to support the definition of a Mineral Resource and the classifications contained in the JORC Code (2012 Edition). Assay results not discussed in this report.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if 	 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.





Criteria	JORC Code explanation	Commentary
	material.	
Sample security	The measures taken to ensure sample security.	Assay results not discussed in this report.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• No audits or reviews of the data associated with this drilling have occurred.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 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. 	 Drilling by CXO took place within EL30015, which is 100% owned by CXO. EL30015 was previous 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	 Acknowledgment and appraisal of exploration by other parties. 	 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.





Criteria	JORC Code explanation	Commentary
		 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 spodumee) 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. 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.
Geology	• Deposit type, geological setting and style of mineralisation.	 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

	RE Com								
Criteria	JORC Code explanation	Commenta	ry						
		Report 1 BP33, Ha The Finn and schi margin o granitoio The sou generally and whio Lithium Bilato's (and CX0 including and Sand	16). The m ang Gong hiss pegma ists of the of the Pin d plutons rce of the y accepted ch probab mineralis (Picketts) a O have io g Grants, E dras.	hain pegma and Sandra atites have Burrell Cr be Creek G and pegma fluids tha das being the dand saffum dentified s BP33, Booth	atites in thi is intruded e eek Forma eosyncline. titic granite at have for he Two Sist s the entire been ident s 1 (both ar podumene hs, Lees, Ha	s belt in arly Pro tion wh To the estocks med the ers Gran area at area at ified his nblygon at nur ng Gong	terozoic ich lies c south a of the Li e intrudi lite to the depths o storically ite) but r merous c, Ah Hoy	t Finniss, shales, si on the no and west tchfield C ng pegm e west of of 5-10 kr y as occu nore rece other pr , Far Wes	Grants, iltstones orthwest are the complex. atites is the belt, n. urring at ently LTR ospects, t Central
Drill hole Information	• A summary of all information material to the understanding of the	Hole_ID		East	North	RL	Azi	Dip	TD
	exploration results including a tabulation of the following information for all Material drill holes:	NRC094	RC	693775	8597986	24.13	101	-61	91
	 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 	NRC095	RC	693772	8597921	23.93	98	-58	91
		NRC096	RC	693903	8598033	22.02	283	-60	139
		NRC097	RC	693913	8597953	22.77	282.51	-71.65	234
	 hole length. 	NRC098	RC	693803	8597760	27.28	279.56	-60.63	133

NRC099

NRC100

NRC105

RC

RC

RC Precol

693905

693937

693901

8597869

8597907

8597848

23.72

22.49

23

268.86

265

280

-60.35

-55

-65

175

120

150

• 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.





Criteria	JORC Code explanation	Commentary							
		NRC106	RC Precol	693923	8597893	23	280	-65	174
		NRC107	RC	693928	8597951	23	268	-60	208
		NMRD003	DDH	693903	8597787	23	280.97	-66.3	278.7
		NRCD001	DDH	693897	8597848	23	279.8	-65.16	247.7
		NRCD002	DDH	693923	8597893	23	278.82	-64.86	245.9
Data aggregation methods	 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. 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. 	Assay res	ults not dis	cussed in th	nis report.				
Relationship between mineralisation widths and intercept lengths	 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'). 	 The majority of holes have been drilled at angles of between 60 - 80° an approximately perpendicular to the NNE strike of the pegmatite. The pegmatite is steeply dipping to the east. As such mineralised intersection true widths are variable but all but two (NRC094 and NRC095) ar approximately 60-80% of the down hole length. The exceptions are NRC094 and NRC095, The widths of pegmatit intersected in those holes are not true thickness. 					80° and ite. The ersection 095) are egmatite		
Diagrams	 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. 	Refer to	Figures and	l Tables in t	the release.				

Criteria	JORC Code explanation	Commentary
Balanced reporting	 Where comprehensive reporting of all Exploration Results is no practicable, representative reporting of both low and high grade and/or widths should be practiced to avoid misleading reporting o Exploration Results. 	 All exploration results have been reported. f
Other substantive exploration data	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations geophysical survey results; geochemical survey results; bulk sample size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics potential deleterious or contaminating substances. 	 All meaningful and material data has been reported. s s k ;
Further work	 The nature and scale of planned further work (e.g. tests for latera extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions including the main geological interpretations and future drilling areas provided this information is not commercially sensitive. 	 CXO will undertake a Mineral Resource Estimation in the coming week. ,