ASX: CXO Announcement

1 August 2022

BP33 drilling delivers outstanding results

Highlights

- BP33 continues to deliver world-class high-grade lithium intersections with 66.88m[1] @ 1.78% Li_2O in NMRD030, including:
  - 16m @ 2.27% Li_2O; and
  - 9m @ 2.24% Li_2O
- Multiple drill intersections below southern BP33 pegmatite with the orebody open at depth
- Spodumene bearing pegmatite extends at depth to the south with indications that thickness and grade improve with depth
- Intersections outside of the current Mineral Resource at BP33 expected to deliver substantial orebody extensions
- Trial Geophysical (ANT) survey at BP33 successfully images pegmatite to 500m depth

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Advanced Australian lithium developer, Core Lithium Ltd (**Core** or **Company**) (ASX: **CXO**), is pleased to provide an update on recent exceptional drilling results and exploration activities at the BP33 Deposit, part of the Finniss Lithium Project (Finniss Project) near Darwin in the Northern Territory.

BP33 Drilling Results

Diamond drilling at BP33 commenced in May, with assays now starting to be received by the Company. A total of three deep diamond drill holes have intersected the main BP33 mineralisation at depths of up to 470m below surface (Figure 1 and 2).

[1] The true thicknesses of the intersections are approximately two thirds of those shown (i.e. downhole intersection of 67m equals true thickness of approximately 45m).

A further five diamond holes have intersected variable thicknesses of mineralised pegmatite associated with the southern BP33 body at depths below any previous drilling and up to 420m below surface (Figure 2).

Geological logging of theses holes has confirmed that spodumene bearing pegmatite extends at depth to the south with indications that thickness, and grade may improve with depth. Although the main and southern bodies are currently modelled as separate entities, the location of this drilling also provides support that they are likely continuous.

Significant intersections from assays received are shown below with full drill hole data included in Table 1 and Figure 3.

- **66.88m @ 1.78% Li_2O** in NMRD030
    - **Incl. 16m @ 2.27% Li_2O and 9m @ 2.24% Li_2O**

- 27m @ 1.50% Li_2O in NMRD023
    - **Incl. 4m @ 2.02% Li_2O**

- 15.0m @ 1.22% Li_2O in NMRD031
    - **Incl. 7.0m @ 1.70% Li_2O**

The true thicknesses of the intersections are approximately two thirds of those shown (i.e. downhole intersection of 67m equals true thickness of approximately 45m). The continuity in grade and thickness displayed, together with the position of the intersections outside or on the boundary of the current Mineral Resource envelope, is expected to result in an increase in the Mineral Resource estimate for BP33.

Core Chairman Greg English commented:

"The BP33 orebody appears to be getting better at depth with 66.88m @ 1.78 Li_2O, an outstanding result. We are in the middle of our largest ever drill campaign and these latest results more than justify our decision to expand our exploration efforts.

"BP33 south is open at depth with the Ambient Noise Tomography ("ANT") survey identifying additional targets at the deposit. The timing of these outstanding results could not have been better, with the final mining approval for BP33 expected in the coming weeks.

"These new world-class lithium drilling results reflect the confidence Core has in delivering significant resource growth from Finniss that will add to our life of mine and our capacity to materially increase lithium production from northern Australia in the future to keep up with rapidly growing global demand."

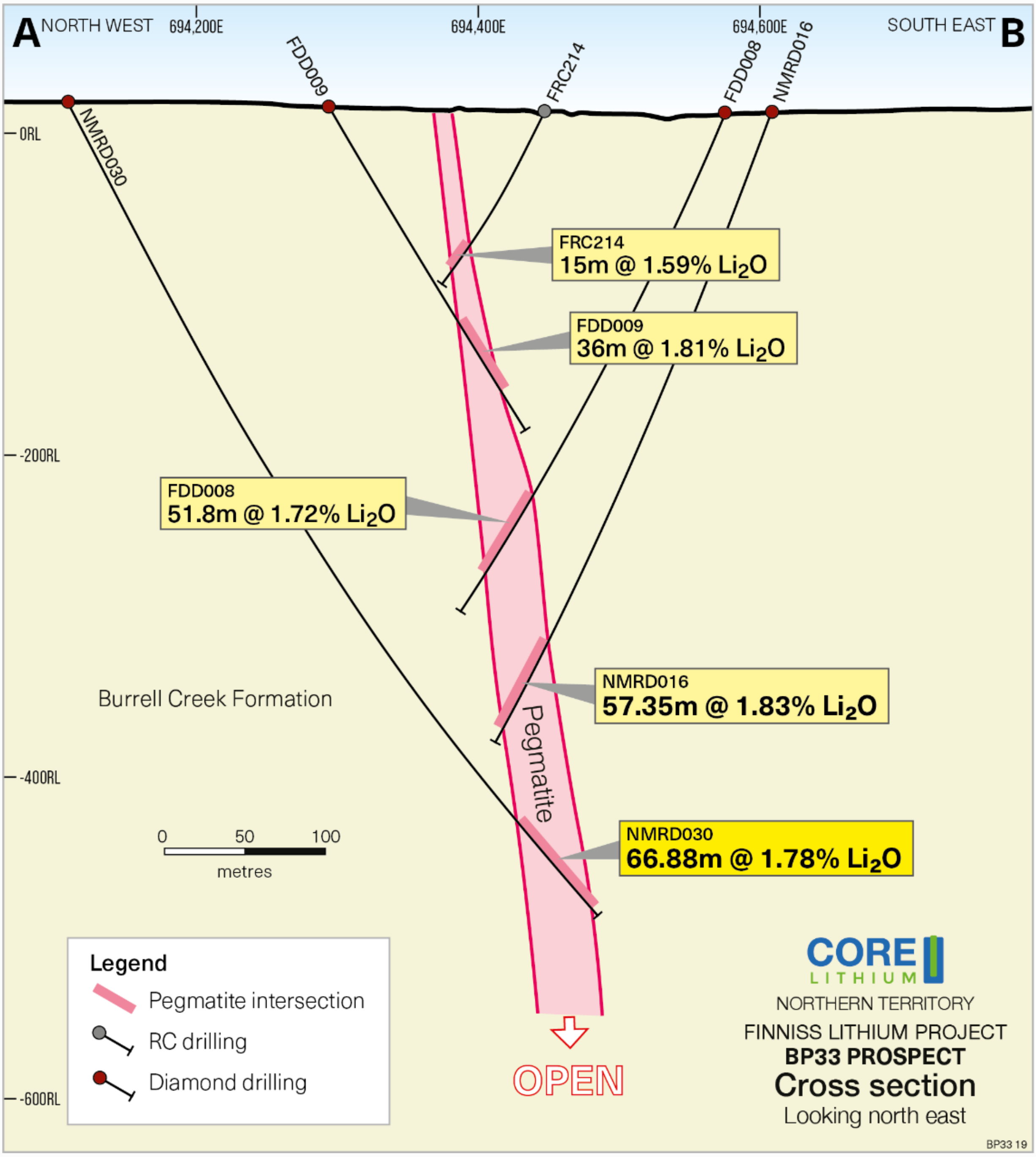

Figure 1. Cross-section for BP33 showing new and previous drill assay results.

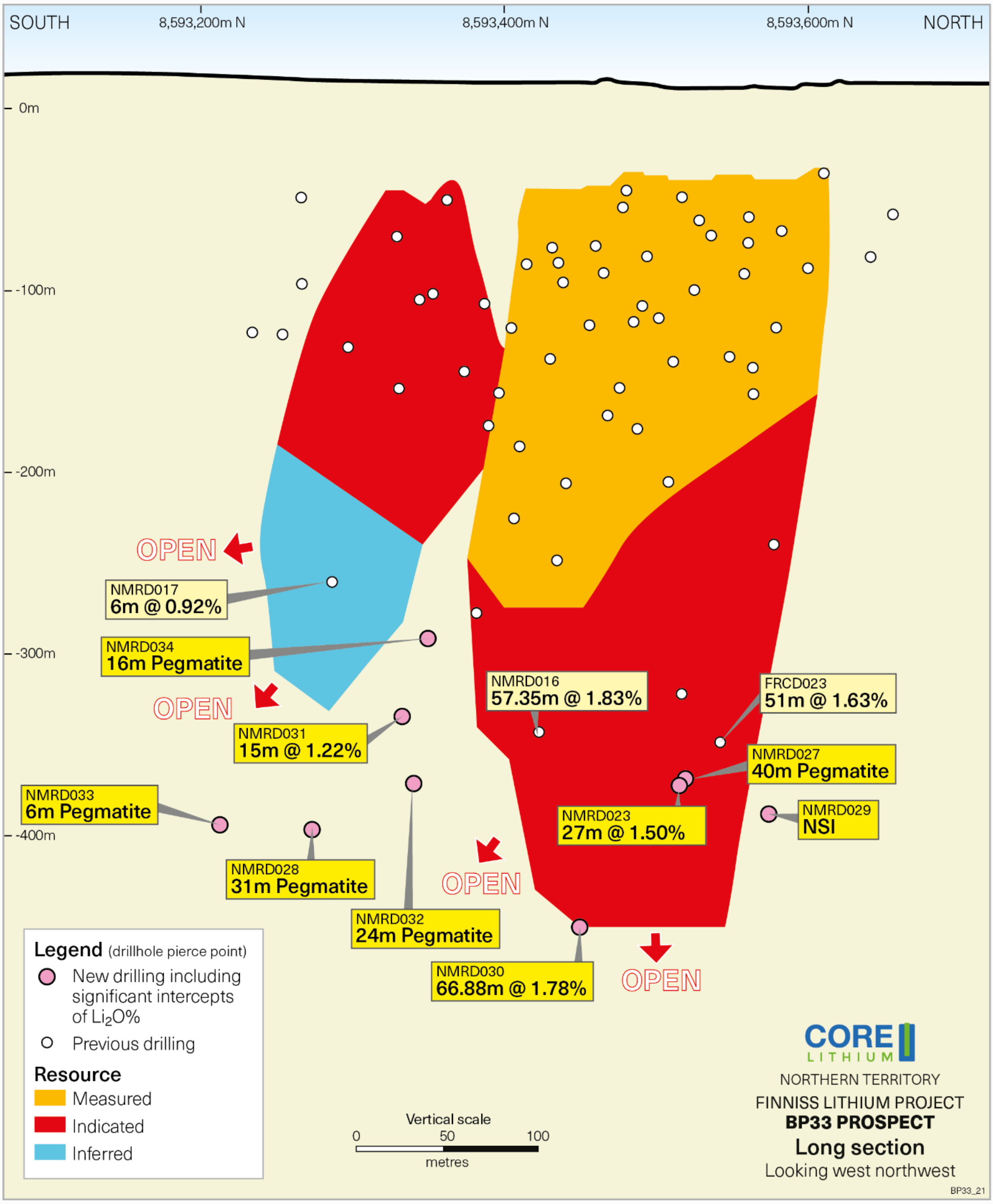

Figure 2. Long-section for BP33 showing the current Mineral Resource (coloured by resource category), with new assay results (intercept widths are not true width).

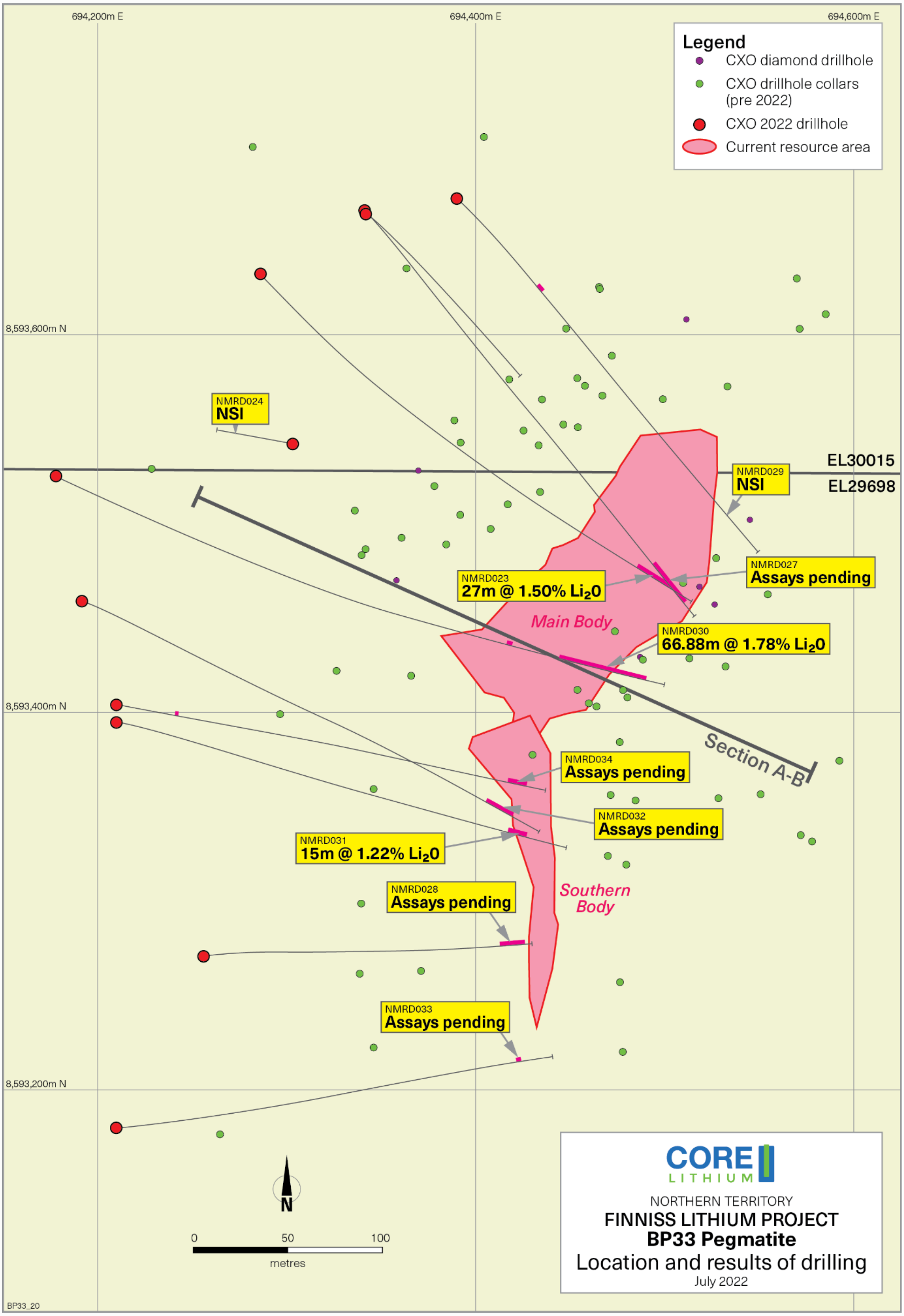

Figure 3. Plan of BP33 showing recent drilling results and Mineral Resource distribution.

ANT Geophysical Trial

In May, Core commissioned Fleet Space Technologies to undertake a trial Ambient Noise Tomography ("ANT") survey at BP33 to test the effectiveness of the technique at detecting pegmatites at depth. Finding a successful geophysical technique for identifying the Finniss pegmatites has been elusive, and the ability to target blind pegmatites is seen as a major breakthrough in exploration for the project.

The results were an outstanding success, with the BP33 body imaged as a low S-wave velocity anomaly, showing excellent correlation with the pegmatite body interpreted from drilling (Figure 4). Although the trial was only conducted over BP33, a number of previously unknown targets have emerged, and it is now CXO's intention to use the technique in untested areas and prioritise targets for drill testing. The now proven ability to detect subsurface pegmatites at considerable depths (at least 500m) will be a major boost for future exploration. ANT technology is a cost-effective method of informing drilling targets.

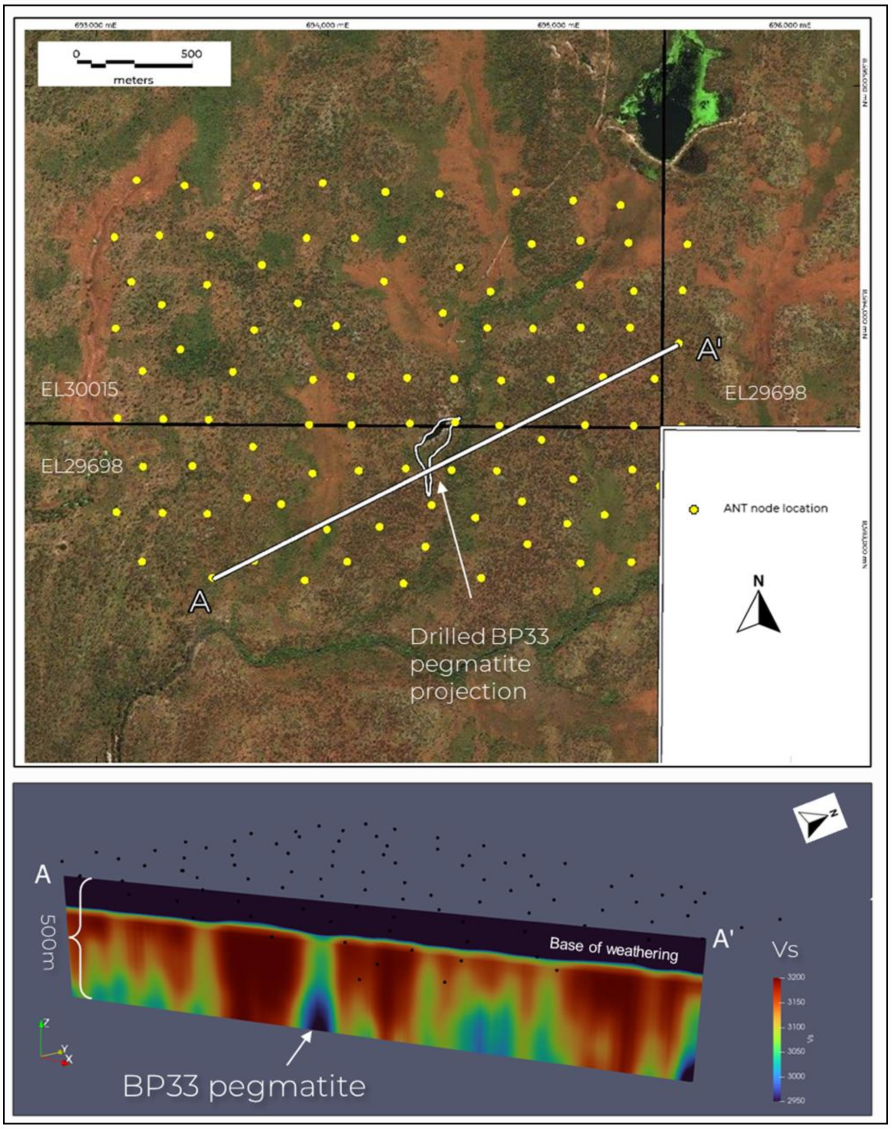

Figure 4. Slice of 3D velocity model through the southern part of BP33 showing pegmatite response.

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

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About Core

Core Lithium is building Australia's newest and most advanced lithium project on the ASX, the Finniss Project in the Northern Territory. Finniss has been awarded Major Project Status by the Australian Federal Government, is one of the most capital efficient lithium projects and has arguably the best logistics chain to markets of any Australian lithium project. The Finniss Project (Figure 1) will provide the globe with high-grade and high-quality lithium suitable for lithium batteries used to power electric vehicles and renewable energy storage.

Competent Persons Statements

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by 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 it is not aware of any new information or data that materially affects the results included in this announcement previously released as "Wide, High Grade Intersection at BP33 ahead of DFS" on 27 March 2019, "High-grade Intersections at BP33 update" on 15 October 2019, "Broad High-grade Lithium Intersections extend BP33" on 18 February 2022 and "Final 2021 Lithium Drilling Assays Received" on 10 May 2022.

Table 1 Summary of BP33 drill hole data and received assay results at the Finniss Project

Hole ID	Prospect	Drill Type	Easting	Northing	Dip	Azimuth	Total Depth	From (m)	To (m)	Interval (m)	Grade (Li_2O%)
NMRD023	BP33	MRD	694286	8593632	-60.31	135.88	510.36	461.0	488.0	27.0	1.50
							incl	473.0	477.0	4.0	2.02
NMRD024	BP33	MRD	694303	8593542	-70.74	278.2	123.5	93.0	96.0	3.0	1.16
NMRD025	BP33	MRD	694172	8593887	-69.7	320.32	73.9	No Significant Intercept			
NMRD026	BP33	MRD	694342	8593664	-62.8	131.51	239.1	No Significant Intercept			
NMRD027	BP33	MRD	694341	8593666	-66.61	137.2	511.13	Assays Pending			
NMRD028	BP33	MRD	694256	8593271	-69.48	84.24	465.1	Assays Pending			
NMRD029	BP33	MRD	694390	8593672	-65.48	133.2	519.7	No Significant Intercept			
NMRD030	BP33	MRD	694178	8593525	-60.71	113.03	618.62	536.0	602.88	66.88	1.78
							incl	555.0	571.0	16.0	2.27
							incl	578.0	582.0	4.0	2.54
							incl	590.0	599.0	9.0	2.24
NMRD031	BP33	MRD	694211	8593399	-60.2	101.67	461.8	406.0	421.0	15.0	1.22
							incl	409.0	416.0	7.0	1.70
NMRD032	BP33	MRD	694191	8593459	-60.12	109.93	501.8	Assays Pending			
NMRD033	BP33	MRD	694210	8593182	-65.2	85.21	498.6	Assays Pending			
NMRD034	BP33	MRD	694210	8593404	-56.21	99.86	402.3	Assays Pending			

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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	• 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.	• Diamond core (DDH) drill techniques have been employed for the Core Lithium Ltd ("Core" or "CXO") drilling at BP33. A list of the hole IDs and positions has been included in the release. • Drill core was collected directly into trays, marked up by metre marks and secured as the drilling progressed. • 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. • DDH sampling of pegmatite for assays is done over the sub-1m intervals described above. 1m-sampling continued into the barren phyllite host rock.
Drilling techniques	• 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).	• DDH drilling used a triple tube HQ technique. Core was oriented using a Reflex HQ core orientation tool. • All diamond holes for the current program utilised Mud Rotary precollars to fresh rock (approx. 65m) with diamond tails.

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.	• 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 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. • DDH core recovery is 100% in the pegmatite zones and in fresh host-rock. • Previous studies have shown that there is no sample bias due to preferential loss/gain of the fine or coarse material.
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 DDH drill holes. • Logging recorded lithology, mineralogy, mineralisation, weathering, colour, and other sample features. • DDH core is stored in plastic core trays. • All holes were logged in full. • 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.	• HQ sized drill core is collected through the mineralised zones, and this is considered appropriate for the style of mineralisation. • 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. • Field and lab standards together with blanks were used routinely.

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.	• Sample analysis occurred at Intertek, Darwin, NT. • All samples are crushed and pulverized. • A sub-sample of the pulp is digested via a sodium peroxide fusion in a Ni crucible and analysed via ICP-MS and ICP-OES methods 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. • Intertek utilise standard internal quality control measures including the use of Certified Lithium Standards and duplicates/repeats. • CXO implemented quality control procedures include appropriate certified Lithium ore standards, duplicates for RC drilling and blanks. • There were no significant issues identified with any of the QAQC data.
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data.	• Senior technical personnel have visually inspected and verified the significant drill intersections. • All field data is entered into OCRIS logging system (supported by look-up/validation tables) at site and imported into the centralized CXO Access database. • Hard copies of survey and sampling data are stored in the local office and electronic data is stored on the CXO server. • Metallic Lithium percent was multiplied by a conversion factor of 2.1527/10000 to report Li ppm as Li_2O%.
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.	• Collar locations presented within the release have been determined by handheld GPS. Differential GPS has been used to determine all other collar locations, including RL. Collar position audits are regularly undertaken, and no issues have arisen. • The grid system is MGA_GDA94, zone 52 for easting, northing and RL. • All of the CXO drilled DD 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.
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	• Drill spacing is illustrated in the Long Section. • The mineralisation and geology show good continuity from hole to hole and will be sufficient to support the definition of a Mineral Resource and the

	appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • Whether sample compositing has been applied.	classifications contained in the JORC Code (2012 Edition). • All DDH mineralised intervals reported are based on a maximum of one metre sample interval, with local intervals down to 0.3m.
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 material.	• 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. • Estimates of true thickness have been discussed in the announcement to avoid confusion. • No sampling bias is believed to have been introduced.
Sample security	• The measures taken to ensure sample security.	• 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. No such discrepancies occurred.
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.	• Drilling by CXO took place on EL30015 and EL29698, which are 100% owned by CXO. • 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.

Criteria	JORC Code explanation	Commentary
	• 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.	
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. • By 1909 activity was limited to Leviathan and Bells Mona mines in the area with little activity in the period 1907 to 1909. • The records of production for many mines are not complete, and in numerous cases changes have been made to the names of the mines and prospects which tend to confuse the records still further. In many cases the published names of mines cannot be linked to field occurrences. • In the early 1980s the Bynoe Pegmatite field was reactivated during a period of high tantalum prices by Greenbushes Tin which owned and operated the Greenbushes Tin and Tantalite (and later spodumene) Mine in WA. Greenbushes Tin Ltd entered into a JV named the Bynoe Joint Venture. • 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 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

Criteria	JORC Code explanation	Commentary
		published in 2004 (NTGS Report 16, Frater 2004). • LTR drilled the first deep RC holes at BP33, Hang Gong and Booths in 2016, targeting surface workings dating back to the 1980s. The operators at that time were seeking Tin and Tantalum. • CXO subsequently drilled BP33, Grants, Far West, Central, Ah Hoy and several other prospects in 2016. • After purchase of the Liontown tenements in 2017, CXO drilled Lees, Booths, Carlton and Hang Gong.
Geology	• Deposit type, geological setting and style of mineralisation.	• The tenements listed above cover the northern and central portion of a swarm of complex zoned rare element pegmatite field, which comprises the 55km long by 10km wide West Arm – Mt Finniss pegmatite belt (Bynoe Pegmatite Field; NTGS Report 16). The main pegmatites in this belt include Mt Finniss, Grants, BP33, Hang Gong and Sandras. • The Finniss pegmatites have intruded early Proterozoic shales, siltstones and schists of the Burrell Creek Formation which lies on the northwest margin of the Pine Creek Geosyncline. To the south and west are the granitoid plutons and pegmatitic granite stocks of the Litchfield Complex. The source of the fluids that have formed the intruding pegmatites is generally accepted as being the Two Sisters Granite to the west of the belt, and which probably underlies the entire area at depths of 5-10 km. • Lithium mineralisation has been identified historically as occurring at Bilato's (Picketts) and Saffums 1 (both amblygonite) but more recently CXO have identified spodumene at numerous other prospects, including Grants, BP33, Booths, Lees, Hang Gong, Ah Hoy, Far West Central and Sandras.
Drill hole Information	• 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: o easting and northing of the drill hole collar o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	• A summary of material information for all drill holes drilled and discussed in this release is contained within the body of the report. This includes all collar locations, hole depths, dip and azimuth as well as current assay or intercept information. • No drilling or assay information has been excluded.

Criteria	JORC Code explanation	Commentary
	o dip and azimuth of the hole o down hole length and interception depth o hole length. • If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
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.	• Any sample compositing reported here is calculated via length weighted averages of the 1 m assays. Length weighted averages are acceptable method because the density of the rock (pegmatite) is constant. • 0.4% Li_2O was used as lower cut off grades for compositing and reporting intersections with allowance for including up to 3m of consecutive drill material of below cut-off grade (internal dilution). • No metal equivalent values have been used or reported.
Relationship between mineralisation widths and intercept lengths	• 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').	• All holes have been drilled at angles of between 55 - 70° and approximately perpendicular to the strike of the pegmatite. The pegmatite dips steeply to the east. Refer to the drill hole table for dip and azi data. • Some holes deviated in azimuth and therefore are marginally oblique in a strike sense. • Based on rough assessment of drill sections, true width represents about 50-70% of the intercept width.
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 Tables in the release.

Criteria	JORC Code explanation	Commentary
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	• All exploration results received to date for the BP33 prospect have been reported. • Assays for some DD holes at BP33 are still pending and will be reported when received.
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 samples – 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. • Ambient seismic noise refers to the continuous vibrations that are present in the earth at different frequencies. Geophones are acoustic detectors which respond to these vibrations and when laid in out in a grid, allows subsurface rocks with differing S-wave velocities to be detected. • The ANT survey was completed under the supervision of Fleet Space Technologies. Approximately 100 Geophones (NuSeis NRU 1C type Geophone Sensors) were deployed at approximately 200m spacing for approximately 10 days. • Refer map in text for locations of survey and geophone locations. • Post processing and velocity modelling of the data by Fleet Space Technologies
Further work	• The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). • Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• Further drilling is being planned for the remainder of the 2022 dry season to both expand the resource at depth and further define extensions to the south.