



ASX: CXO

ASX ANNOUNCEMENT

6th July 2018

Extensions to Grants Lithium Deposit Intersected in New Exploration Drilling

HIGHLIGHTS

- New drilling has identified significant extensions directly south along strike and at depth at Grants - outside of the existing defined Mineral Resource
- New results include a 73m downhole intersection of spodumene pegmatite
- These extensions demonstrate the potential to further increase the size of the Mineral Resources and mine life at Grants
- Any incremental mine life through extensions to the Grants deposit or proximate discoveries is expected to have material positive impacts on the financial returns from development of the proposed 1Mtpa Finniss Lithium Project
- Drilling to recommence at Grants later this month to test for further depth and strike extensions once drill-rig at BP33 completes current phase of work
- Regional exploration is ramping up at Finniss aimed at discovery of additional ore sources at the Finniss Project
- Assays from this recent phase of drilling at Grants are expected in coming weeks

Emerging Northern Territory lithium developer, Core Exploration Ltd (ASX:CXO) ("Core" or the "Company") is pleased to announce the discovery of significant extensions to the Grants Lithium Deposit, part of the Company's wholly-owned Finniss Lithium Project, located near Darwin in the Northern Territory.

New drilling results include a 73m intersection of spodumene pegmatite located outside of the existing defined resource at Grants. These new results are significant and highlight the





potential to immediately grow the currently defined resource at Grants (Figure 1) which underpinned the strong economics of the recent Pre-Feasibility Study.

All 10 holes drilled in this recent phase of drilling intersected pegmatite extensions to the Grants Mineral Resource. Most of the pegmatite intersections included spodumene pegmatite, with the spodumene content of the intersections the grade being typically higher in the thicker parts of the pegmatite and lower where the pegmatite is thinner.

These new intersections are expected to add to the existing Mineral Resource at Grants and highlights that the spodumene pegmatite orebody at the deposit is still open to the south along strike and at depth (Figure 1).

Drilling will recommence at Grants later this month to test for further depth and strike extensions once the current phase of drilling at BP33 is completed. Similarly, the current drilling at BP33 is also targeting extensions to the initial JORC-2012 Mineral Resource (see ASX:CXO 23/05/2018).

Assays from the recently completed phase of drilling at Grants are expected toward the end of July.

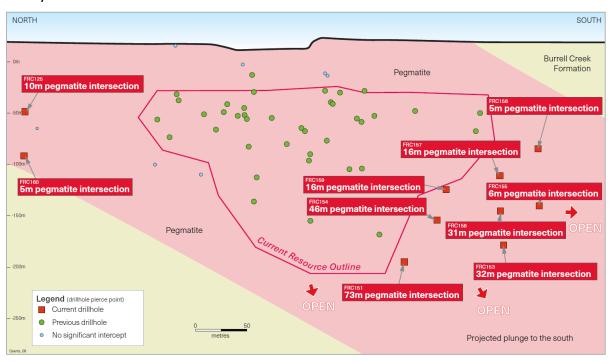


Figure 1. Grants Lithium Deposit and new extension drill intersections within Core's 100%-owned Finniss Lithium Project

These new results highlight the potential to increase the size of the Resources to be incorporated in the Definitive Feasibility Study (DFS) later this year. The DFS will build on the strong economics defined in the recently released CXO Pre-Feasibility Study (PFS) (see ASX:CXO 25/06/2018) focused on the production of lithium concentrate commencing in late 2019 from the Finniss Project.





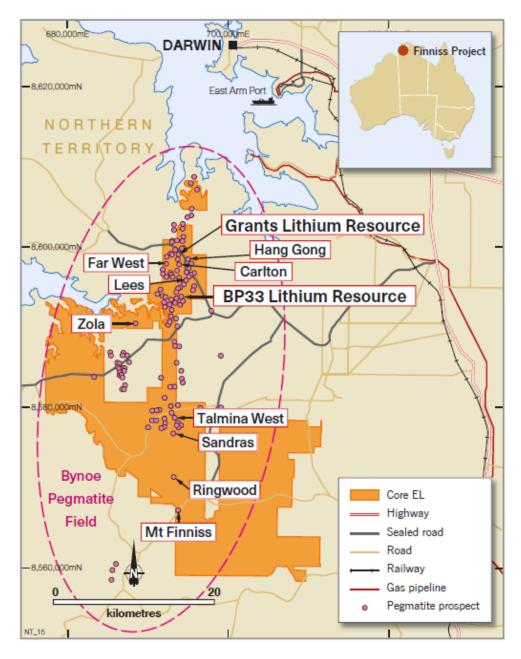


Figure 2. Grants Resource within Core's 100%-owned Finniss Lithium Project

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Competent Persons Statements

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Stephen Biggins (BSc(Hons)Geol, MBA) an employee of Core Exploration 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. This report includes results that have previously been released under JORC 2012 by Core.

Core confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning the Mineral Resource estimates in the announcements "Grants Lithium Resource Upgrade" dated 8 May 2018 and "Maiden Resource Estimate at BP33" dated 23 May 2018 continue to apply and have not materially changed. The Mineral Resources underpinning the production target have been prepared by a Competent Person in accordance with the requirements of the JORC code.

Core confirms that all material assumptions underpinning production target and forecast financial information derived from the product target announced on 25 June 2018 continue to apply and have not materially changed.





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. | Drilling geology reported herein relate to Reverse Circulation (RC) at the Grants Deposit on EL29698. The azimuth of Core's drill holes is oriented approximately perpendicular to the interpreted strike of the mineralised trend. Holes are oblique in a dip sense (refer figures). Assays will be reported in due course |
| 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.). | The Schramm 685 RC Drill Rigg used is a wheel mounted rig and running a compressor/booster combo. The rig is operated by Swick Services. |
| 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 | RC sample recoveries were visually estimated in the field and recorded by Core geologists for each metre drilled. RC recoveries are monitored qualitatively as the hole progresses. A semi-quantitative estimate of % recovery is subsequently made after completion of the hole, once the average volume of material can be |





| | whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. | gauged for a metre of drilling. 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. No material bias has been recognised. |
|----------------------------|---|---|
| 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. | Standard sample logging procedures are utilised by Core, including logging codes for lithology, minerals, weathering etc. A chip tray for the entire hole is completed. A sub-sample is sieved from the large RC bags at site into chip trays over the pegmatite interval to assist in geological logging. These are photographed and stored on the Core server. Geology of the RC drill chips were logged on a metre basis with attention to main rock forming minerals within the pegmatite intersections. Geology of the drill core is logged on a geological basis with attention to main rock forming minerals and textures within the pegmatite intersections. Entire drilled interval of RC and DDH logged. Pegmatite sections are also checked under a single-beam UV light for spodumene identification on an ad hoc basis. These only provide indicative qualitative information. Estimation of mineral modal composition, including spodumene, is done visually. This will then be correlated to assay data when they are available. Core trays and RC chip trays are photographed and stored on the Core server. Geotechnical logging has been carried out on oriented DDH drillholes that CXO have drilled subsequent to the resource drilling. Remaining holes from 2018 DDH program are also oriented and can be logged in future if needed. |
| Sub-sampling techniques | 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. | No assays are reported |





| and sample preparation | 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/secondhalf sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. | |
|---|---|---|
| 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. | No assays are reported |
| 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. | Core's experienced project geologists are supervised by Core's Exploration Manager. All field data is entered into excel spreadsheets (supported by look-up tables) at site and subsequently validated as it is imported into the centralized CXO Access database. Hard copies of survey and sampling data are stored in the local office and electronic data is stored on the Core server. |
| Location of data points | Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. | Coordinate information for the Grants drillholes was collected by Differential GPS, by Land Surveys Australia Pty Ltd. This data is accurate to 10 cm in all three dimensions. These collar RLs were verified against CXO's DTM. All are GDA94 Zone 52. In 2018 program, RC and DDH hole traces were surveyed by north seeking Champ gyro tool (multishot mode at 5m and 10m intervals) |





| 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. | operated by the drillers and the collar is oriented by a line of sight compass and a clinometer. Downhole Camera shots are also taken on an ad hoc basis during drilling to ensure the holes are kept relatively straight. Drill hole deviation has been minor and predictable in the most part. However, for the deeper holes, deviation was significant in the lower parts of the holes as a result of hard bedrock. Despite this, the holes still tested the targets roughly oblique to the strike of the pegmatite, which is acceptable for resource drilling. In any case, the gyro down hole survey has accurately recorded the drill traces and any deviation from the planned program can be accommodated in a 3D GIS environment. Drill collars are spaced approximately 25m apart along the north trending pegmatite body of Grants. This data will be used to support a resource. Refer to figures in 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 material. | Core's drilling is oriented perpendicular to the interpreted strike of mineralization (pegmatite body) as mapped or predicted by the geological model. In some areas the rocks may trend at an angle to the drill traverse. Because of the dip of the hole, drill intersections are apparent thicknesses and overall geological context is needed to estimate true thicknesses. The azimuth of Core's drill holes is largely oriented approximately perpendicular to the interpreted strike of the mineralised trend. Holes are oblique in a dip sense. |
| Sample security | The measures taken to ensure sample security. | Company geologist supervises all sampling and subsequent storage in field and transport to point of dispatch to assay laboratories. |
| Audits or reviews | The results of any audits or reviews of sampling techniques and data. | A review of sample weights, recovery statistics and assay data with regard to the sampling techniques was undertaken after the 2016-2017 |





drilling program to demonstrate representivity.

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 Core at Grants Prospect on what is EL29698 that is 100% owned by Core. The area being drilled comprises Vacant Crown land There are no registered heritage sites covering the areas being drilled. The tenement is 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 Harbour – Middle Arm 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, but it was exhausted and closed down the following year after a total of 189 tons of concentrates had been won. By 1909 activity was limited to Leviathan and Bells Mona mines in the area with little activity in the period 1907 to 1909. Renewed activities in 1925 coincided with the granting of exclusive prospecting licences over an area of 26 square miles in the Bynoe Harbour – West Arm section but once again nothing eventuated. 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 |





| Geology | Deposit type, geological setting and style of mineralisation. A supposit to the understanding | between Plant between Plant between Plant between In 1996 their present ascerta The NT 2004 (Note: The Fin Burrell To the Elitchfien general probabes Lithium (ambly) | en 1980 and etween 1980 and tributed in 1991 and in 1991 and in 1996 the field ining the lit geological stress Reportite field, white belt (By Mt Finniss pegma Creek Form south and vold Complex lly accepted ly underlies in mineralisation and vold in 1998 and | drilled RC hes, did not ass d has been of thium prospers Survey under the north hich comprise the Pegmat Grants, BP3 attites have in nation which west are the start as being the start as the entire as the more recent | out to out to oles intay for la defunct ectivity rtook a 2004). The result of the field of the granito of the erword rea at an identity at G | to repre- ti. to repre- ti. tuntil r of the a region ortion of 55km I d; NTG g Gong l early F a the no bid plut fluids t Sisters depths tified as Grants, | esentation of a swa ong by S Report and Sa Proterozorthwes ons and Granite of 5-10 s occurr BP33 ar | when opegmaticalisal of the color of co | om its Observed 10m depth relation Pty I matites in the exploration relation in the exploration relations. If the field, we complex zone wide West Arche main pegales, siltstone in of the Pine atitic granite red the intruction west of the Bilato's (Pick Bras. | vation Hill emains at least who operated who operated who operated which was provided as and schilled creek George stocks of the ding pegma belt, and we etts), Saffur | Freatment BP33. erated it tike all of on ublished in ment on iss this belt ests of the psyncline. The atites is which ent of the orange of the |
|---------------------------|---|---|--|---|---|--|---|--|--|--|--|
| Drill hole Information | A summary of all information material to the understanding of the exploration results including a tabulation of the | Hole | East | North | RL (m) | Azi° | Dip° | TD (m) | Peg From (m) | Peg To (m) | Peg Int. (m) |
| , 51111411011 | | | | | | | | | | | |
| , | following information for all Material drill holes: o easting and northing of the drill hole collar | FRC151 | 693120 | 8598900 | 18 | 270 | -65 | 172 | 189 | 262 | 73 |





| | level in metres) of the drill hole collar | FRC153 | 693085 | 8598790 | 18 | 270 | -63 | 244 | 205 | 237 | 32 |
|---|---|----------|--------------|--|--------|--------|----------|---------|-------------|------------|------------|
| | o dip and azimuth of the hole | FRC154 | 692890 | 8598928 | 22 | 90 | -60 | 244 | 188 | 234 | 46 |
| | down hole length and interception depth hole length. | FRC155 | 692883 | 8598809 | 18 | 93 | -60 | 232 | 181 | 188 | 7 |
| | If the exclusion of this information is justified on the basis | FRC156 | 692916 | 8598816 | 20 | 90 | -60 | 149 | 124 | 129 | 5 |
| | that the information is not Material and this exclusion does | FRC157 | 692918 | 8598855 | 18 | 93 | -60 | 172 | 146 | 162 | 16 |
| | not detract from the understanding of the report, the | FRC158 | 692889 | 8598859 | 18 | 90 | -60 | 238 | 196 | 227 | 31 |
| | Competent Person should clearly explain why this is the case. | FRC159 | 692930 | 8598905 | 20 | 90 | -65 | 202 | 141 | 189 | 48 |
| | | FRC160 | 693030 | 8599300 | 20 | 90 | -60 | 160 | 144 | 149 | 5 |
| | | FRC125 | 693060 | 8599300 | 20 | 90 | -55 | 110 | 83 | 92 | 9 |
| aggregation methods | 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. | | | | | | | | | | |
| 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'). | dip of t | he hole, dr | e of drillhole ill intersectic e true thickr | ns are | appare | nt thick | knesses | and overall | geological | context is |
| 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 | See figu | ıres in repo | ort. | | | | | | | |





| | plan view of drill hole collar locations and appropriate sectional views. | |
|---|---|---------------------|
| 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. Exploration results are discussed in the report an exploration results are discussed in the report and exploration results. | d shown in figures. |
| Other substantive exploration data | se reported melading (sat not immed to), geological | |
| 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. Core is continuing to assess Grants as part of a Feometria in the provided and part of a Feometria in the provided in the provided and part of a Feometria in | asibility Study. |