ASX ANNOUNCEMENT

ASX: CXO

25th August 2017

Appointment of General Manager Project Development and Finniss Lithium Project Update

HIGHLIGHTS

- **Key appointment of Blair Duncan to role of General Manager Project Development**
- **DSO development studies advancing on Grants Lithium Resource**
- **Preparations for lodgement of Mining Lease Application advanced**
- **Offtake discussions maturing with potential project offtake partners**
- **RAB and RC drilling to commence around Grants in early September**
- **Drill results for initial round of RC drilling at the large-scale Ringwood pegmatite swarm expected in September**

Core Exploration Limited (**ASX:CXO**) ("**Core**" or the "**Company**") is pleased to provide an update for activities at its Finniss Lithium Project and to announce the appointment of Mr Blair Duncan as General Manager Project Development to spearhead development of its Finniss Lithium Project near Darwin the Northern Territory.

Core's appointment of Mr Duncan marks a key step in Core's goal to progress as quickly as possible into mining operations at its Finniss Lithium Project, initially with a focus on generating cash flow from its high grade Grants lithium deposit through export of high grade DSO spodumene.

Mr Duncan is a Mining Engineer with more than 30 years' operations (open pit and underground across multiple commodities), and senior management experience.

Most recently Mr Duncan was the Chief Operating Officer for BC Iron Limited (ASX:BCI) where he successfully managed the feasibility and expedited development of its Nullagine Iron Ore Project.

Blair has previously held senior management positions with Otter Gold Limited, Straits Resources Limited and Lionore Australia Limited.

Mr Duncan is a Member of the Australasian Institute of Mining and Metallurgy, and has a Bachelor of Engineering degree in Mining Engineering and Masters in Business Administration.

Stephen Biggins, Core's Managing Director commented:

"We are very fortunate to have attracted someone of Blair's calibre to our team. Blair's experience in management of feasibility studies and mine development will be of great value to Core as we transition from pure explorer into a mine developer, starting with our high grade Grants deposit, where Core is seeking to establish the first lithium mine in the Northern Territory".

Finniss Lithium Project Update

Core's immediate objective is to capitalise on the robust pricing that can potentially be achieved from selling a high grade DSO product, with a view to generating cashflow to fund continued exploration to define large scale spodumene resources, and ultimately development of a long life lithium spodumene concentrate operation from its hub at the Finniss Project in the Bynoe pegmatite field of the Northern Territory.

Core completed a Preliminary Mining Study into the development of the Grants deposit in May 2017, which demonstrated strongly positive outcomes from the development of a simple open pit DSO spodumene mining operation based on the modest scale Grants Resource (refer ASX announced dated 8 May 2017).

Since completing its positive Preliminary Mining Study, Core has continued to make solid progress on its path towards DSO production including:

- Environmental baseline studies underway;
- Appointment of Blair Duncan as General Manager Project Development;
- Discussions being matured with potential project offtake partners;
- Synergies being evaluated with domestic lithium battery supply chain;
- Heads of Agreement for potential future use of key port facilities at the East Arm Wharf with the port operator to export up to 1Mtpa DSO product; and
- Preparations for lodgement of the Mining Lease Application, which is expected to be lodged in due course.

Core's plan to develop the Finniss Lithium Project is supported by arguably the best logistic chain to China of any Australia Lithium Project being within 25km of Darwin Port - Australia's nearest port to China.

The Project also has substantial infrastructure advantages, including being close to sealed road, grid power, gas and rail infrastructure and less than 1 hour drive from the skills, trades, workshops and services in suburban Darwin.

Core expects to lodge its Mining Lease Application in due course, which will be a key step in the timetable towards development.

In the interim, the Company is commencing the next step of its feasibility studies, and it continues to mature its discussions with potential offtake and project partners to assist in funding development and sale of product from the Grants deposit.

Figure 1: Simple sealed road access to East Arm Wharf of Darwin Port.

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2017 Exploration Programme Update

Grants Region

A RAB drilling program is planned to commence in early September in the region around the high-grade Grants Lithium Resource. RC drilling of new pegmatite targets defined by RAB near Grants will follow shortly thereafter.

A component of this RAB program will be assigned to testing for pegmatite bodies identified adjacently west of Grants, which had been highlighted by recent ground radar surveys.

An update on current exploration and proposed drilling in the Grants area is planned shortly.

Ringwood Prospect

Core's early work to date suggests that the Ringwood Pegmatite Swarm extends over an area of more than 4 km long and 2 km wide – an area 10 times larger than Zola.

Core has recently completed a series of shallow (<10m depth) reconnaissance RAB drilling traverses at Ringwood. Early drilling has discovered several broad pegmatite zones in excess of 100m wide at the large-scale Ringwood Pegmatite Swarm (Figure 2).

Of note, a 150m wide pegmatite zone has been confirmed by shallow RAB drilling at the northern end of the large Mastotermes Pegmatite target - the corresponding Mastotermes magnetic feature which is 1,200m long (Figure 2).

The large scale of the pegmatite targets and system at Ringwood is likely to require a number of phases of drilling to effectively assess.

Core's first phase of RC drilling at Ringwood that comprised 37 holes for 5170m of RC was completed last week. Inspection of RC chips has shown the pegmatites to be made up of quartz, feldspar, mica and minor fluorescent minerals interpreted to be lithium minerals.

Assays results are expected 4 weeks after completion of drilling.

Zola Prospect

Core's recent drilling has confirmed that the central outcropping "core zone" of the Zola Pegmatite Swarm covers a large area more than 1,000m long and over 400m wide representing a significant volume of pegmatite with elevated lithium contents.

Core is encouraged by the large scale and lithium fertility of the pegmatites intersected in initial drilling at Zola and the Company's immediate plan is to RC drill test the additional mapped pegmatites on the fringe of the first-pass drilling area commencing in early September.

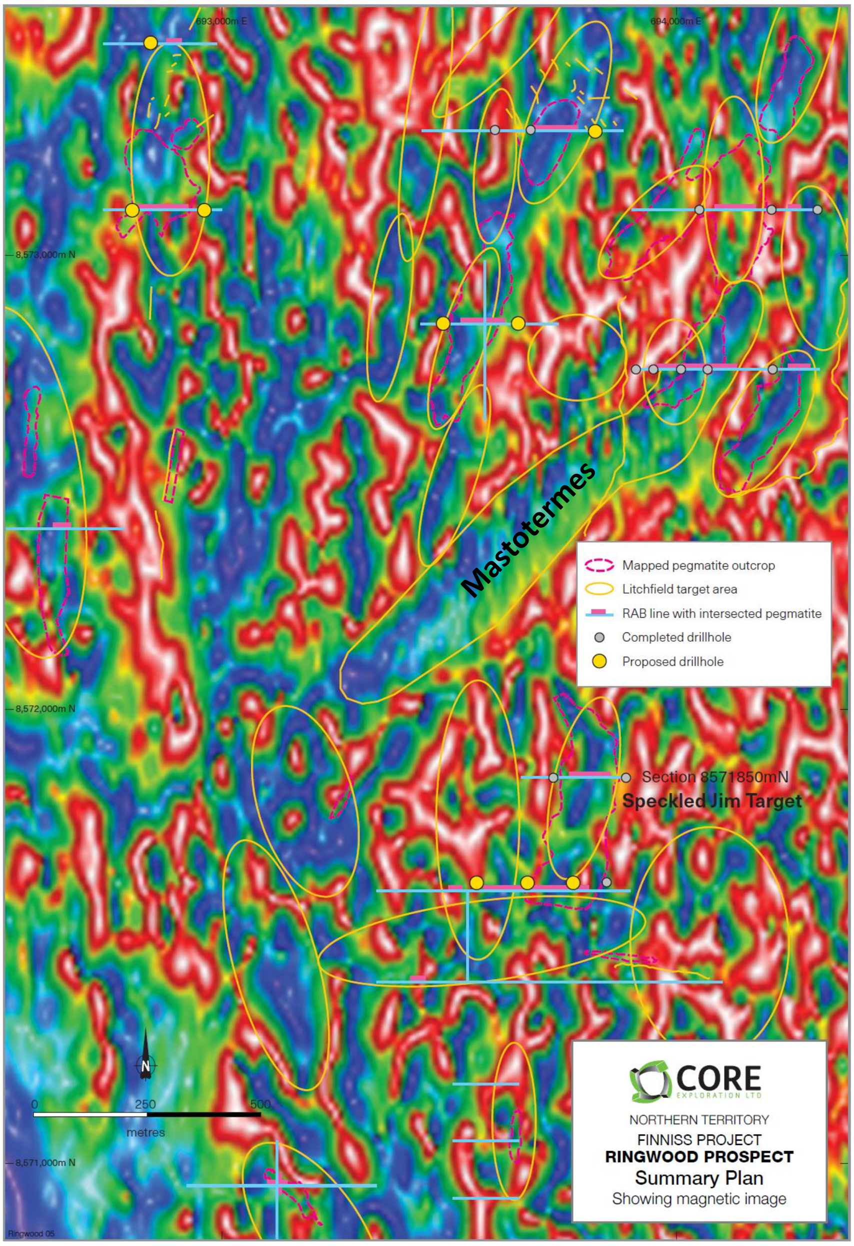

Figure 2. Pegmatite intersections in RAB drilling, pegmatite interpreted targets and RC drill location overlain on magnetic image, central Ringwood Prospect, Finniss Lithium Project NT.

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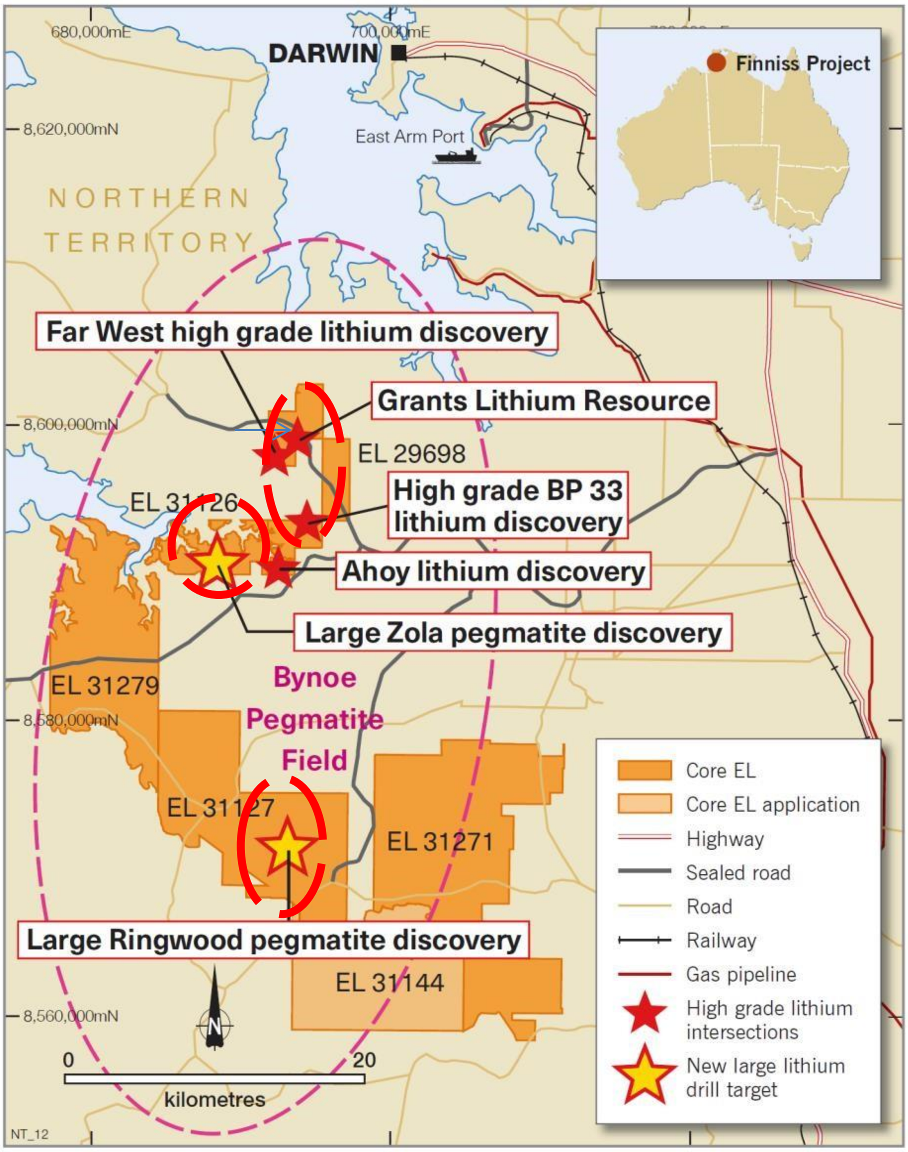

Figure 3. Grants, Zola and Ringwood regional drill target locations Finniss Lithium Project near Darwin, NT.

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) as Managing Director 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. The Company is not aware of any new information that materially affects the information included in this announcement. This announcements contains exploration results released on 4 April 2017 as "New Magnetic Survey Adds Sizeable Targets to Ringwood".

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 (eg 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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.*	• Drilling geology results reported herein relate to RRC001 to RRC015 at Ringwood Prospect, EL31127. • Sub surface chip samples have been collected by reverse circulation (RC) drilling and Rotary Air Blast (RAB) techniques. • Drill holes are oriented approximately perpendicular to the interpreted strike of the mineralised trend. • Samples submitted for assay typically weigh 2-3kg. • RC samples are to be homogenised by cone splitting prior to sampling and are then submitted for to the laboratory for assay. RAB samples are speared directly from the spoils bags. • Soil samples were collected on grids on a regional basis via the digging of a hole to >30 cm to retrieve B horizon soil (or A horizon in the absence of B). This was sieved on site to -5mm and put into a kraft pack weighing approx. 150 g. • Soil Sample locations were determined with a hand held GPS, coordinates and geological descriptions were noted for each sample. • Soil Samples were collected during various campaigns, the most recent being in May-June 2017. Data has been gridded collectively.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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 technique used at Ringwood and reported herein comprises standard Reverse Circulation (RC) 4 and 3/4 inch face sampling hammer (5.5 inch diameter bit). • The rig used is a multipurpose wheel mounted UDR1000 and running a 1700 CFM 500 psi compressor/booster combo.

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.*	• Sample recoveries are visually estimated and recorded for each metre. To date sample recoveries have averaged >95%. • Contamination is monitored regularly. No issues have been encountered in this program. • The cyclone and splitter are regularly cleaned, especially in wet intervals. • 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.
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 the company, including logging codes for lithology, minerals, weathering etc. • Geology of the RC drill chips is logged on a metre basis with attention to main rock forming minerals within the pegmatite intersections.
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*	• RC samples are collected as 1 metre samples, cone split at the cyclone and then calico-bagged. Usually these weigh 2-3 kg. Samples may also be composited from the green bags (below) via a spear. • A 30-40 kg primary sample is collected in green bags and retained until assays have been returned and deemed reliable for reporting purposes. • Most samples are dry, but wet or damp samples are recorded. • Duplicate sample regime is used to monitor sampling methodology and homogeneity. • A powder chip tray for the entire hole is completed. A separate sub-sample is sieved from the large RC bags at site into chip trays over

Criteria	JORC Code explanation	Commentary
	being sampled.	the pegmatite interval to assist in geological logging. • **Soil** samples are approx. 150 g in size and orientation programs have determined that the size, seive size fraction and depth collected are sufficient to discern trends for regional assessment purposes. • Duplicates were collected at roughly 1 in 20 sites to monitor sampling variability. No discernable variations have been noted in the data. • Replicates of soil samples are also collected on a 1 in 20 basis to determine local variability and to modify grid size if needed. Replicates are behaving in a manner that is expected for the geochemical system present. • No other quality control procedures were considered necessary for this reconnaissance style sampling program.
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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• No drilling assays are reported here. • After sample preparation (see above), **soil** sample pulps were then analysed via 4A/MS 4 Acid Digest ICP-MS: and 4A/OE 4 Acid Digest ICP-OES for a broad element suite including Li. The lower and upper detection range for Li by this method are 1 ppm and 5000 ppm respectively. • Other elements beyond Li that are routinely analysed are: Cs, Rb, Sr, Nb, Sn, Ta, Bi, Mo, U, Sb and As. • Samples collected in early campaigns were also analysed for Al, K, P, Cu, Pb, Zn, Ag and Be. These were eliminated subsequently as they did not prove to add sufficiently to the exploration effort for the extra costs incurred. • **Gold** was analysed in soils only in selected areas, such as Ringwood, where there is geological evidence to suggest this analysis was required. • NAL utilised standard internal quality control measures including the

Criteria	JORC Code explanation	Commentary
		use of Certified Lithium Standards and duplicates. • Repeats of gold analysis were run on anomalous samples at the laboratory routinely, given the low level of detection required. • CXO-implemented quality control procedures are outlined above and include duplicates and replicates.
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 manually collected, entered into excel spreadsheets and validated. • Hard copies are stored in the local office and electronic data is stored on the Core server. • For **soils**, the Sample ID, location (east/north), position (in situ vs transported), rocktype and detailed description were entered into a spreadsheet. Additional information to the above is collected, including depth collected, soil colour and soil type. • Metallic Lithium percent was multiplied by a conversion factor of 2.15283 to report Li2O%
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.*	• All coordinate information was collected using hand held GPS utilizing GDA 94, Zone 52. • RC holes were surveyed by down hole Camera tool and the collar is oriented a clinometer tool. • Drill hole deviation has been minor to moderate, but acceptable for regional exploration.
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*	• Soil samples collected on regular grids, ranging from 400x200m to 50x25m. Several programs of infill took place where anomalous results could be followed up. • Assays results are not referred to herein.

Criteria	JORC Code explanation	Commentary
	classifications applied. • *Whether sample compositing has been applied.*	
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 typically oriented perpendicular to the interpreted strike of mineralisation as mapped or predicted by the geological model.
Sample security	• *The measures taken to ensure sample security.*	• Company geologist supervises all sampling and subsequent storage in field.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews have been undertaken.

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.*	• **Soil** samples were collected in 4 tenements (see below). Drilling took place in EL31127. • EL29698 is currently held by Lithium Developments Pty Ltd, a fully owned subsidiary of Core Exploration. The tenement lies exclusively within Vacant Crown Land. Core is the nominated Operator in respect of the NT Government. • EL31279, EL31127 and EL31126, including Mt Finniss Mine, are held by Core Exploration via it’s 100% owned subsidiary Lithium Developments Pty Ltd. These tenements comprise Vacant Crown land, NT Government owned land and private freehold.

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		• There are no registered heritage sites covering the areas sampled. • All tenements are in good standing with the NT DME 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 Tantalite (and later spodumene) Mine in WA. Greenbushes Tin Ltd entered into a JV named the Bynoe Joint Venture with Barbara Mining Corporation, a subsidiary of Bayer AG of Germany. • Greenex (the exploration arm of Greenbushes Tin Ltd) explored the Bynoe pegmatite field between 1980 and 1990 and produced tin and

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		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).
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The tenements sampled cover the northern and southern portions 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 are: Mt Finniss, Grants, BP33, Bilato's (Picketts) and Hang Gong. • 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 as occurring at Bilato's (Picketts), Saffums 1 (amblygonite), and more recently at Grants, BP33, Ah Hoy, Far West and Hang Gong (spodumene). • The Burrell Creek Formation increases in metamorphic grade

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		westward from sub-greenschist facies siltstone, phyllite and siltstone, to upper greenschist facies gneiss and schist. Sedimentary features and lithologies, typical of the lower grade units of the Burrell Creek Formation, can be recognised until the sillimanite isograd is approached, whereafter these features are obliterated by recrystallisation.
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:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• RAB and RC drill hole traverse locations are shown on the figures in the report.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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.*	• No data aggregation report

Criteria	JORC Code explanation	Commentary
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 (eg 'down hole length, true width not known').*	• As the soil geochemical results reported here that were collected by Core Exploration are from surface, any potential depths of mineralisation or orientations can only be inferred from geological observations on the surface and hence are speculative in nature. • No drillhole assay data is presented here.
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.*	• See figures in release
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.*	• Reporting in report is balanced
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.*	• See release details
Further work	• *The nature and scale of planned further work (eg 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 this first pass reverse circulation drill program on EL31127 to test the soil geochemical results from 2016 and 2017 sampling campaigns, and magnetic targets. • Further infill soil sampling, rockchips follow-up and general prospecting are on going. • Assays from drill samples are pending.