ASX ANNOUNCEMENT

ASX: CXO

25h October 2016

High Quality, Coarse Grain Spodumene Revealed in First Diamond Core Drilling at Finniss Lithium Project

HIGHLIGHTS

- **First diamond core drilled at Finniss has revealed the high quality of the spodumene mineralisation at Finniss**
- **Initial observations indicate spodumene ore at Finniss shows good characteristics for potential concentrate processing**
- **200kg sample of large diameter core of spodumene pegmatite to be prepared for metallurgical test work to potentially produce commercial grade spodumene concentrate**
- **Como Engineers appointed to manage metallurgical test work and provide preliminary engineering advice on the Finniss Lithium Project**
- **Diamond drilling follows high grade lithium discoveries in Core's maiden RC drill program at Finniss including:**
  - **34m @ 1.60% Li_2O from 71m (FRC003) at BP33 Prospect**
  - **49m @ 1.78% Li_2O from 71m (FRC007) at Grants Prospect**
  - **40m @ 1.66% Li_2O from 58m (FRC018) at Grants Prospect**
- **Diamond drilling to commence at Grants after diamond drilling at BP33 is completed and may be used to follow up any further discoveries made by Core's Phase 2 RC drilling program which is expected to commence shortly**
- **Further drill updates will be reported in coming weeks from diamond and the Phase 2 RC drilling programs at Finniss**

Core Exploration Ltd (ASX: CXO) ("Core" or the "Company") is pleased to announce that the first diamond core from the high grade BP33 lithium pegmatite at the Finniss Lithium Project near Darwin in the NT ("Finniss") has revealed high quality coarse grained spodumene that is potentially amenable to processing to produce commercial grade spodumene concentrate.

Initial observations of the BP33 core show that high grade lithium as spodumene is almost ubiquitous throughout the first 40m fully-cored pegmatite drill intersection (Figure 1-3).

Figure 1. Large green spodumene crystals hosted by lighter coloured (white) feldspar and quartz. 95.2m – 103.1m FRDD001 (HQ), BP33 Prospect, Finniss Lithium Project NT.

As a result, Core has immediately commenced preparation for this large diameter HQ core and additional cored drillholes at Grants (once completed) to be sent for metallurgical test work to determine their potential to produce commercial grade spodumene concentrate.

Core has also appointed specialist engineering consultants Como Engineers to manage the proposed metallurgical testwork and provide early engineering advice to the Finniss Lithium Project. Como Engineers have an excellent track record with previous successful input to both Pilbara Minerals Ltd's Pilgangoora Lithium Project and Galaxy Resources Ltd's Mt Caitlin Lithium Project.

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Once Core's initial diamond core drilling is completed at BP33, diamond drilling will then commence at Grants and may also possibly follow-up any further targets discovered by Core's Phase 2 exploration RC drilling which is expected to commence shortly.

Figure 2. Pink/Beige spodumene making up a high proportion of pegmatite volume.
88.1m – 89.5m FRDD001 (HQ), BP33 Prospect, Finniss Lithium Project NT.

Spodumene Pegmatite Mineralisation at BP33 in FRDD001

Spodumene is almost ubiquitous throughout the BP33 pegmatite intersected in FRDD001.

Spodumene mineralisation is relatively consistent for most of the 40m of continuous pegmatite intersected from 80m downhole, if approximately metre-scale pegmatite margins and quartz cores are disregarded.

Spodumene crystals vary in colour from pale green, pink, dull yellow and also some white varieties are present. No other lithium minerals appear evident, such as amblygonite or lepidolite (Figures 1-3).

On preliminary inspection it appears that the pegmatite at BP33 comprises only a few simple minerals, in overall order of abundance: feldspar, spodumene, quartz and muscovite (less than 5%). The spodumene content appears to be comparable with that indicated by the lithium assays of the nearest sub-parallel RC drillhole (FRC003 (Figure 4).

Spodumene forms large equant to bladed crystals generally >1 cm in size and many spodumene crystals observed are >10 cm in length. Visually continuous zones of this mineral are present, where equant spodumene crystals are intergrown with each other and also with feldspar and quartz (Figure 1-3).

Tin and tantalum minerals are no doubt present based on assays from the RC twin hole, but these are not immediately evident in the core.

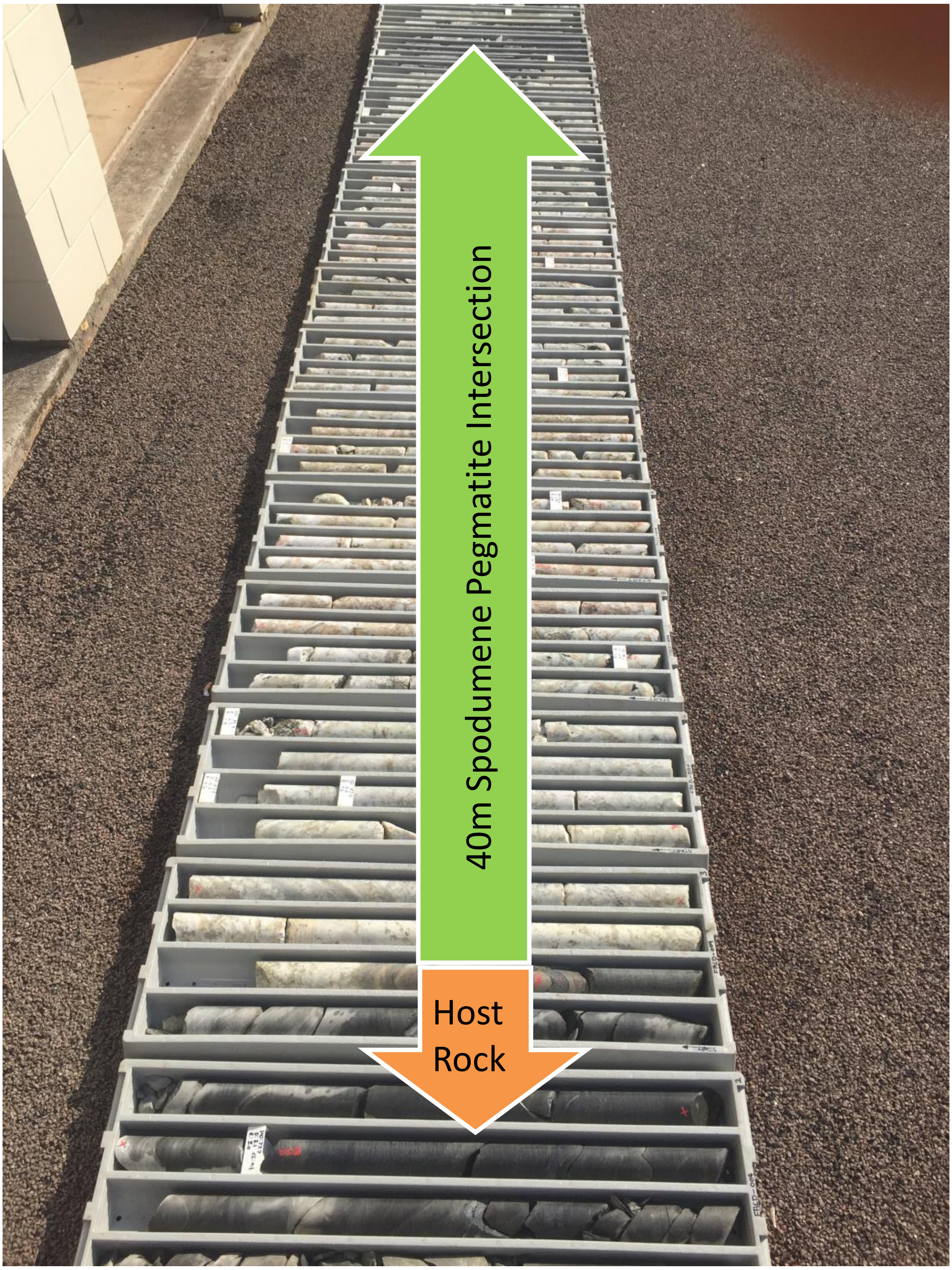

Figure 3. Spodumene Pegmatite HQ Drill Core.
70.8m – 134.6m FRDD001 (HQ) BP33 Prospect, Finniss Lithium Project, NT.

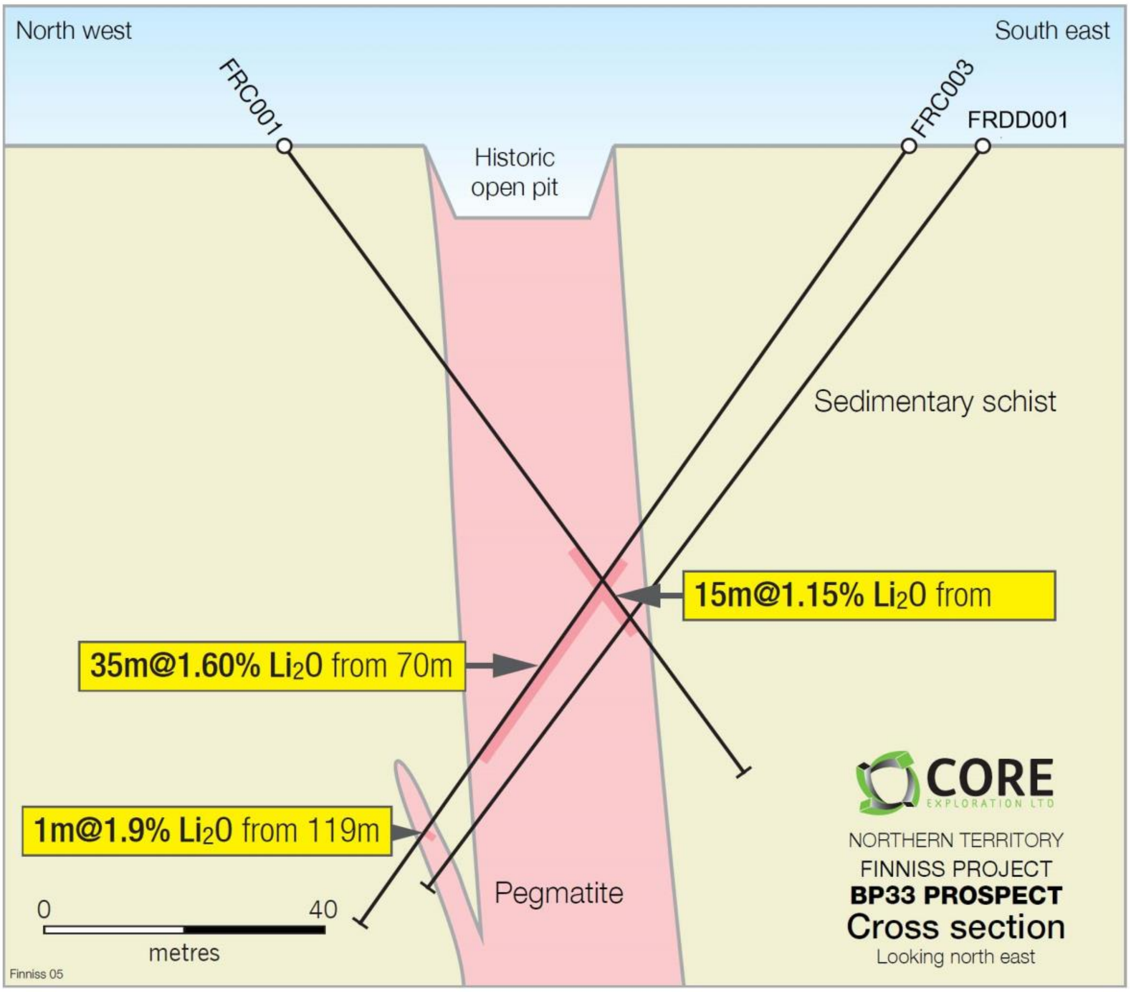

Figure 4. FRDD001 and X-section BP33 Prospect, Finniss Lithium Project, NT.

Finniss Lithium Project Background

Core's Finniss Lithium Project covers a large portion of the Bynoe Lithium-Tantalum-Tin Pegmatite field (Figure 4).

Core's drilling at Finniss has intersected high lithium grades and spodumene mineralisation within a number of pegmatites at Finniss.

The Bynoe Field is a 15-20 kilometre wide belt of more than 90 tin and tantalum prospects and mines and lithium rich pegmatites which stretches over a distance of 75 kilometres south from Port Darwin and is one of the most prospective areas for lithium in the NT.

Core's Finniss Lithium Project has substantial infrastructure advantages being close to grid power, gas, and rail and services infrastructure and within easy trucking distance by sealed road to the multi-user port facility at Darwin Port - Australia's nearest port to Asia.

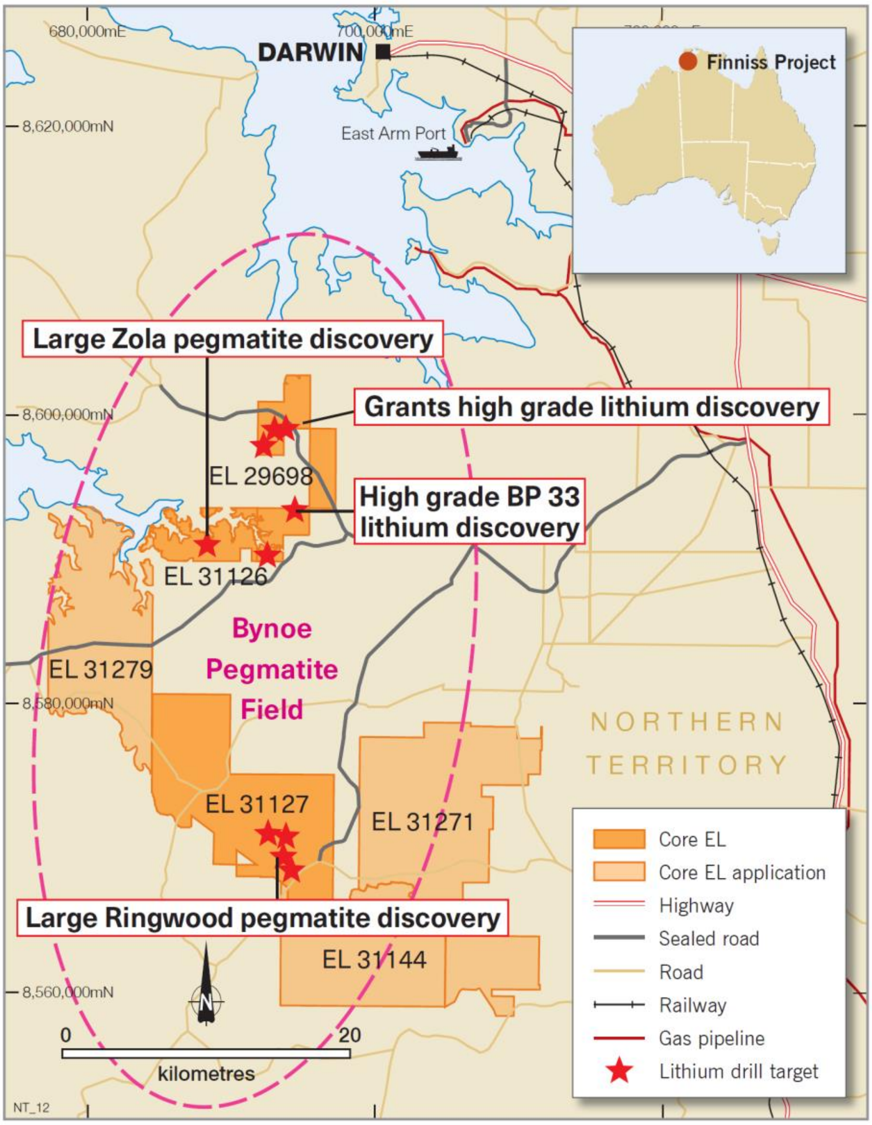

Figure 5. Initial drill target locations, Finniss Lithium Project, NT.

<u>For further information please contact:</u>

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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.

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 (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.*	• Sub surface HQ drill core has been collected at FRCD004 by diamond core drilling technique (see below). • No material has been prepared for assays as yet. Visual estimates of mineralogy and content with the aid of UV light and LIBS portable analyser. • Drill hole oriented approximately perpendicular to the interpreted strike of the mineralised trend. .
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 Finniss in relation to this ASX release comprises conventional wireline HQ coring using a track mounted rig under contact with WDA Drilling (Kalgoorlie).
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.*	• Sample recoveries are visually estimated and recorded for each metre. To date sample recoveries have averaged >95%. • Drilling contractor notes intervals of poor recovery and provides this information to the client.

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Criteria	JORC Code explanation	Commentary
	• *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.*	
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.*	• Geology of the drill core is logged on a geological basis with attention to main rock forming minerals and textrures within the pegmatite intersections. • Pegmatite sections are also checked under a single-beam UV light and LIBS portable analyser 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 method will be improved in the coming months via the implementation of whole-tray analysis by broad UV light source and spectral analysis. This will then be correlated to assay data when they are available.
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.*	Sampling has not yet been conducted
Quality of assay data and laboratory	• *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,*	• Assays have not yet been conducted

Criteria	JORC Code explanation	Commentary
tests	*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.*	
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.*	• No sampling or assay of this drillhole have been conducted
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. • Drillholes are to be surveyed by a down hole camera
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.*	• Varies from prospect to prospect – initial program comprised 1-4 holes into each prospect. This diamond core hole was sighted to twin an existing RC hole (FRC003) and assay data from that hole should readily reflect those that will be returned from this DDH. (refer ASX announcement 23/09/2016).
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 • The drill intersection is oblique to the dip of the pegmatite to the order of approximately 70%
Sample security	• *The measures taken to ensure sample security.*	• Company geologist supervises all sampling and subsequent storage in field.

Criteria	JORC Code explanation	Commentary
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• None completed

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 is being conducted on EL 29698 100% owned by Core. • The area being drilled comprises Vacant Crown land • There are no registered heritage sites covering the areas being drilled. • EL 29698 is 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. • 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 tantalite from its Observation Hill Treatment Plant between 1986 and

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>1988.
• They then tributed the project out to a company named Fieldcorp Pty Ltd who operated it between 1991 and 1995.
• 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).
• Core has recently completed a 4 holes RC drilling program at BP33</td></tr>
<tr><td>Geology</td><td>• Deposit type, geological setting and style of mineralisation.</td><td>• 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 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.
•</td></tr>
<tr><td>Drill hole Information</td><td>• 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</td><td><table><tr><th>BHID</th><th>Site_ID</th><th>GDA94_East</th><th>GDA94_North</th><th>Elevation</th><th>Azimuth_TN</th><th>Azimuth_Mag</th><th>Dip</th><th>TD</th></tr><tr><td>FRCD004</td><td>FRDD001</td><td>694515</td><td>8593558</td><td>30</td><td>305</td><td>87</td><td>-55</td><td>134.6</td></tr></table>•
• Refer text of the report</td></tr>
</table>

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Criteria	JORC Code explanation	Commentary
	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 (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 grades 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 (eg 'down hole length, true width not known').*	• The true width is approximately 60- 70% of the reported intersection based on the early interpretation of these being steeply dipping pegmatites
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 representative photos of pegmatite drill core and figures in report
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 intersections have been reported and are considered representative. Refer table of drill hole collar.. • No assays have yet been received from the laboratory
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*	• See release details • All meaningful and material data reported

Criteria	JORC Code explanation	Commentary
	deleterious or contaminating substances.	
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.*	• Assays of drillcore • Further RC and diamond drilling subject to results • Testwork on drill-core