ASX ANNOUNCEMENT

ASX: CXO

23rd September 2016

High Grade Spodumene Confirms Finniss Lithium Project as a Significant New Discovery

HIGHLIGHTS

- **First four drill holes at Finniss Lithium Project in NT have returned multiple broad zones of high grade lithium, confirming Finniss Project as a major new lithium discovery**
- **Results include:**
  - **34m @ 1.60% Li_2O from 71m (FRC003), including:**
    - **7m @ 2.02 % Li_2O from 79m**
    - **4m @ 2.00% Li_2O from 93m**
    - **3m @ 2.00% Li_2O from 101m**
  - **14 m @ 1.42% Li_2O from 61m (FR004)**
  - **22m @ 1.01% Li_2O from 68m (FR002), including**
    - **12m @ 1.56% Li_2O from 77m**
- **Significant spodumene mineralisation has been observed at other prospects drilled by Core in its first RC drilling campaign at Finniss for which assay results are awaited**
- **Further lithium assays will be reported in the coming weeks**
- **Scale of Finniss pegmatites are comparable to the scale of pegmatites hosting large lithium resources in the Pilbara region of Western Australia.**

Core Exploration Ltd (ASX: CXO) ("Core" or the "Company") is pleased to announce the results from the first four holes from the Company's maiden lithium drilling program at the Finniss Lithium Project ("Finniss") in the Northern Territory has confirmed Finniss, as a major new discovery of high grade lithium.

BP33 Prospect Results

The first prospect drilled by Core at Finniss was the BP33 prospect, where four holes were drilled with all holes hitting pegmatite intersections over broad 40 – 60 metres (approximately 30-35m true width), containing high grades of lithium as spodumene mineralisation (Tables 1-2 and Figures 1-3).

The best result was 1.60% Li_2O over 34m, containing zones of high grade spodumene mineralisation of up to 7m at 2.02% Li_2O (drill hole FRC003). The other three holes at BP33 also returned zones of high grade lithium. Results are listed in Table 1 below.

The BP33 prospect is located approximately 150m north of BP32 and 200m NE of BP32W. It is likely that all these pegmatite bodies are part of a larger interconnected pegmatite swarm, and Core plans to drill these prospects with subsequent phases of drilling at Finniss. BP33 pegmatite has been mined historically from surface down to 10-20m for tin and tantalum (Figures 1 and 2).

Grants and other Prospects drilled

Core completed its initial 2,000m RC drilling program earlier this week, which in addition to testing BP33, also tested a number of initial pegmatite drill targets on granted EL 29698 (Figure 3).

Preliminary results from these prospects indicate substantial spodumene mineralisation has also been intersected within broad pegmatite at other prospects.

The remaining assays from this RC drilling campaign are expected from the laboratory over coming weeks, and will be released to the market in due course.

Significance of the BP33 Discovery

The discovery of high grade zones of lithium with this current drill program is very significant for Core given the scale of some of the new pegmatites identified by the Company's current field programs are directly comparable to the scale of pegmatites hosting large lithium resources in Western Australia.

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

Hole No.		From (m)	To (m)	Interval (m)	Grade (Li_2O%)
FRC001		72.0	87.0	**15.0**	**1.15**
	including	73.0	80.0	**7.0**	**1.40**
FRC002		68.0	98.0	**22.0**	**1.01**
	Including	77.0	89.0	**12.0**	**1.56**
	Including	82.0	86.0	**4.0**	**2.02**
FRC003		71.0	105.0	**34.0**	**1.60**
	Including	79.0	86.0	**7.0**	**2.02**
	Including	93.0	97.0	**4.0**	**2.00**
	Including	101.0	104.0	**3.0**	**2.00**
		119.0	120.0	**1.0**	**1.88**
FRC004		61.0	75.0	**14.0**	**1.42**
		82.0	90.0	**8.0**	**1.12**

Table 1. Lithium assay grades in all RC drillholes at BP33 Prospect, Finniss Lithium Project NT.

Commenting on commencement of drilling, Core's Managing Director, Stephen Biggins said:

"Core has hit high grade spodumene mineralisation at the first lithium prospect drilled by the Company in the NT, and we are highly encouraged by the potential of our other nearby prospects within the Finniss Project, where we are observing significant spodumene mineralisation that is yet to be assayed for its lithium content.

Core's drilling confirms the Finniss Lithium Project as a major new lithium pegmatite Field in Australia. Very strong lithium grades over wide zones, and a large tenement holdings and excellent infrastructure, including the multi-user Port Darwin less than 30km from where we are drilling, provide Core significant scale and cost advantages compared with other highly valued Australian Lithium Projects".

"We expect these and upcoming assay results to resonate well with potential spodumene customers as they look to focus on highest quality lithium projects in Australia capable of providing long-term supply and potential to be developed in the near term"

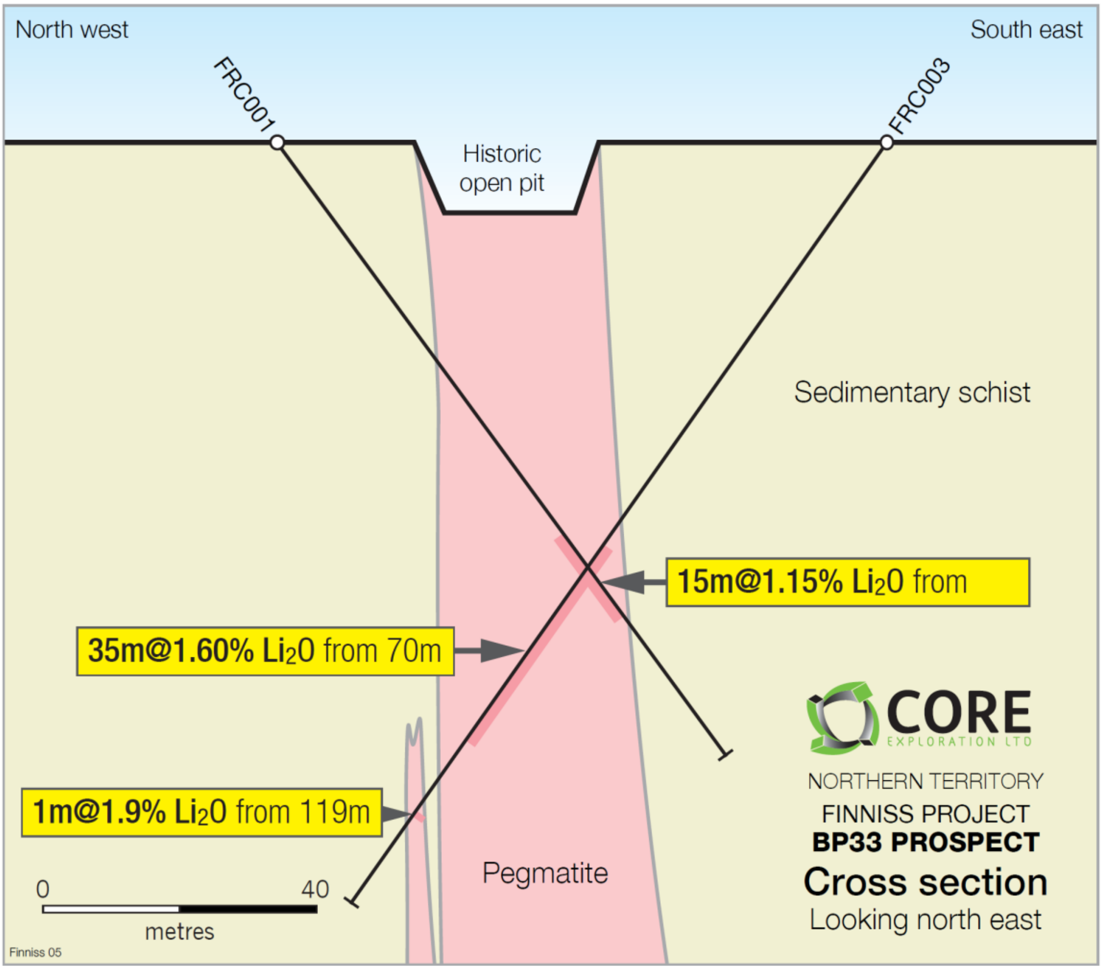

Figure 1. Cross section looking NE of BP33 Pegmatite with recent RC drilling.

Prospect	Hole ID	Pegmatite From (m)	Pegmatite To (m)	Pegmatite Intersection (m)	East	North	RL	Az.	Dip	TD (m)
BP33	FRC001	50.5	91.5	**41**	694436	8593515	30	125	-55	111
BP33	FRC002	64.5	106.5	**42**	694471	8593440	30	303	-55	113
BP33	FRC003	67	121	**54**	694511	8593467	30	305	-55	136
BP33	FRC004	34	94	**60**	694408	8593495	30	125	-55	106

Table 2. Collar information for all RC drillholes at BP33, Finniss Lithium Project, NT.

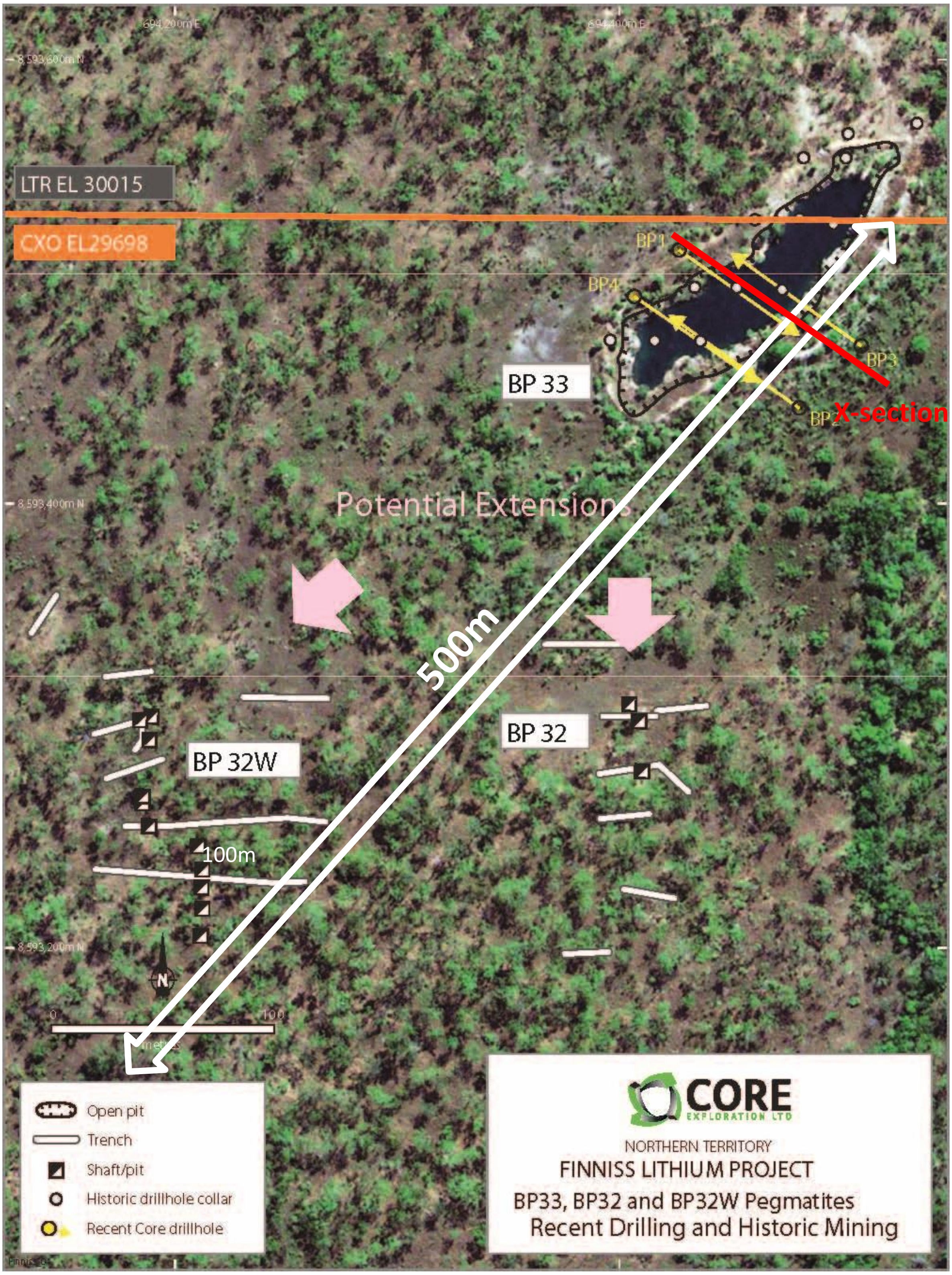

Figure 2. BP33, BP32 and BP32W Pegmatite locations showing recent drilling and previous mining, drilling and trenching work, Finniss Lithium Project, NT.

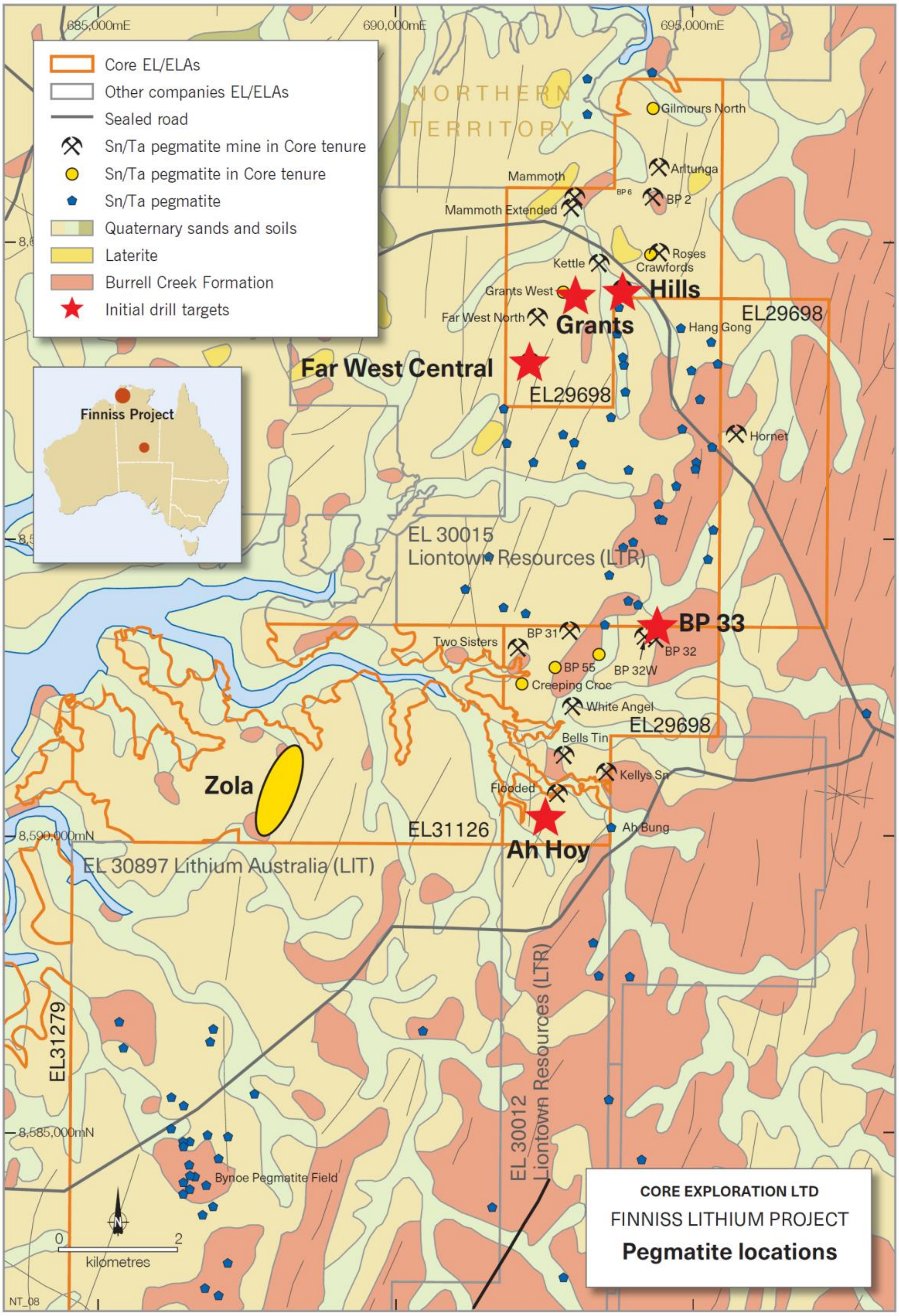

Figure 3. Initial drill target locations, Finniss Lithium Project, NT.

Finniss Lithium Project Background

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

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.

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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 chip samples have been collected by reverse circulation drilling techniques (see below). • Drill holes are oriented approximately perpendicular to the interpreted strike of the mineralised trend. • Rock samples comprise multiple chips considered to be representative of the horizon or outcrop being sampled. • Samples submitted for assay typically weigh 2-3kg. • Historic sampling and drilling techniques not described in detail. • RC samples are homogenised by cone splitting prior to sampling and are then to be submitted for assay
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 techniques used at Finniss comprises: • Reverse Circulation (RC) 4 and 7/8 face sampling hammer • RC drilling techniques completed by Greenbushes in 1995 not documented in historic reports.
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%. • Drill collars are sealed to prevent sample loss and holes are normally drilled dry to prevent poor recoveries and

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.*	contamination caused by water ingress. Wet intervals are noted in case of unusual result
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 RC drill chips is logged on a metre basis with attention to main rock forming minerals within the pegmatite intersections • Pegmatite sections are also checked under UV light for spodumene identification on a metre by metre basis
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.*	• Non core samples are collected as 1 metre samples, cone split and then sieved for geological logging. • Assays only for the 1st four drill holes have been received or reported to date.
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,*	• One in twenty Lithium ore standards are used • One in twenty duplicates are used • One in twenty external laboratory checks have not been sent to date.

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Criteria	JORC Code explanation	Commentary
	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.*	• 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 server
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 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 • No compositing has been applied in information in this report.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Drilling is typically oriented perpendicular to the interpreted strike of mineralisation
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.*	• 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 that is currently held by Au Exploration Pty Ltd. Core has recently completed a purchase transaction for EL 29698 (ASX 29/08/2016). Transfer documents have been executed and lodged and registered ownership of EL 29698 is currently being transferred 100% to 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 1988. • They then tributed the project out to a company named Fieldcorp Pty Ltd who operated it between 1991 and 1995.

Criteria	JORC Code explanation	Commentary
		• 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 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 as occurring at Bilato's (Picketts), Saffums 1 (amblygonite) and more recently at BP33 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:*
	  ○ *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*
		• Refer Table 1 and 2 in report.

Criteria	JORC Code explanation	Commentary
	○ *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.*	
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.*	• Mean grades have been calculated on a 0.3% Li_2O lower cut-off grade with 3% upper cut-off grade applied, and maximum internal waste of 3.0 metres (FRC003 cut-off 0.5% and no internal waste).
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.*	• 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.*	• All intersections have been reported and are considered representative. Refer table of drill hole collars in report. • No assays have yet been received from the laboratory
Other substantive	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical*	• See release details

Criteria	JORC Code explanation	Commentary
exploration data	*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 reported
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.*	• RC drill samples are to be submitted to laboratory for chemical assay • Assay results are expected during October 2016