



ASX: CXO

ASX ANNOUNCEMENT

14th February 2018

BP33 Extended by High Grade Lithium Intersections

HIGHLIGHTS

- New diamond core drilling of thick spodumene pegmatite confirms BP33 is open southward toward potential extensions at BP32 and BP32W
- New high-grade lithium drill assays received from diamond core and RC drilling of BP33, including:
 - O 36m @ 1.61% Li₂O from 135m in FRC108
 - Including 14m @ 2.05% Li₂O
 - O 49m @ 1.02% Li₂O from 138m in FMRD003
- Evidence of pegmatites 200m-300m along strike at both BP32 and BP32W add significant scale potential to high grade pegmatite near BP33
- Further assays from new 2018 diamond drill core drilling at BP33 expected during February and March 2018
- Drilling at BP33 aimed at establishing a maiden Resource estimate in March and to add to the Company's Lithium resource inventory at Finniss
- Resource upgrade drilling continuing at Grants deposit (5km from BP33) for which a Pre-Feasibility Study is underway
- Drilling to re-commence testing of BP33 and adjacent BP32 and BP32W in the 2018 dry season

Core Exploration Ltd (ASX: CXO) ("Core" or the "Company") is pleased to announce that new wide and high-grade lithium intersections have identified substantial strike and depth extension potential at Core's 100% owned BP33 pegmatite within its Finniss Lithium Project.





Core's recent drilling at BP33 has found that extensions of the BP33 spodumene pegmatite are open south and south-west toward pegmatites 200m-300m along strike at the BP32 and BP32W prospects (Figures 1-3). If these pegmatites are connected, then there is substantial strike length of approximately 500m to the BP33/BP32/BP32W pegmatite system.

New high-grade assay results received from diamond drilling competed in late 2017 at BP33 include:

- 36m @ 1.61% Li₂O from 135m in FRC108
 - o Including 14m @ 2.05% Li₂O
- 49m @ 1.02% Li₂O from 138m in FMRD003
 - o Including 3m @ 2.18% Li₂O

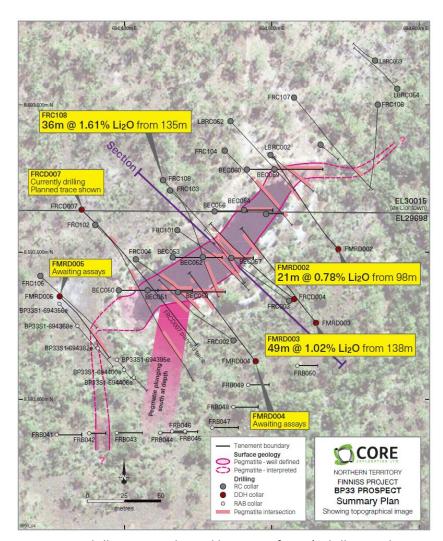


Figure 1. Recent drill assay results and location of Core's drilling to date at BP33.





RC and Diamond drilling to date has characterised BP33 as a wide and continuous spodumene rich pegmatite, including intersections of 62m @ 1.24% Li₂O from 66m in FRC104 and 54m @ 1.42% Li₂O from 101m in FRC103.

Results from the recent diamond and RC drilling also confirm that BP33 pegmatite is open at depth along strike to the south (Figures 1 and 3).

Adjacent pegmatites at BP32 and BP32W prospects have been identified in historic trenching and verified more recently in shallow RAB drilling by Core. However, no RC or Diamond drilling has been conducted yet at nearby BP32 and BP32W Prospects.

Core is planning drilling at both BP32 and BP32W Prospects as soon as the 2018 dry season commences, to test the continuity and grade of these pegmatites adjacent and along strike from high grade BP33.

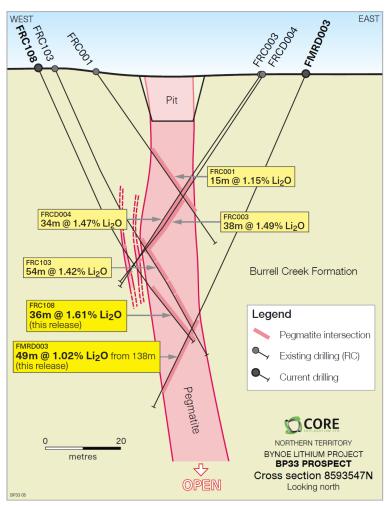


Figure 2. Drill cross-section at BP33.





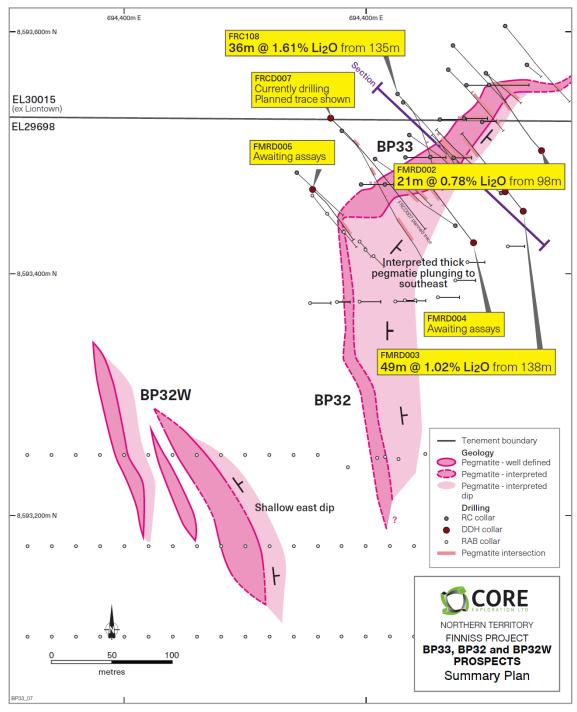


Figure 3. BP33, BP32 and BP32W prospects and interpreted geology.





Next Steps at BP33

This first phase of resource focused diamond drilling at BP33 has been completed, with additional assays expected during February and March 2018. This rig has now been relocated to the Grants deposit (5km away) to focus on resource upgrade drilling.

The recently completed drill program at BP33 is an initial assessment of continuity of grade and scale of the spodumene mineralisation. The drill core will also provide valuable information that may be used for metallurgical testwork and resource evaluation at BP33.

Core is planning further drilling at both BP32 and BP32W Prospects as soon as the 2018 dry season commences (expected Q2 2018) to test the continuity and grade of these pegmatites adjacent and along strike from high grade BP33.

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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. The report includes results that have previously recently been released under JORC 2012 by Core on 23/09/2016 as "High Grade Spodumene Confirms Significant Lithium Discovery", 16/11/2017 as "Widest Spodumene Pegmatite Intersections at BP33", 27/11/2017 as "Wide High-Grade Lithium Drill Intersections at BP33" and 13/12/2017 as "New Assays Extend Intersection to 62m @ 1.24% Li20".





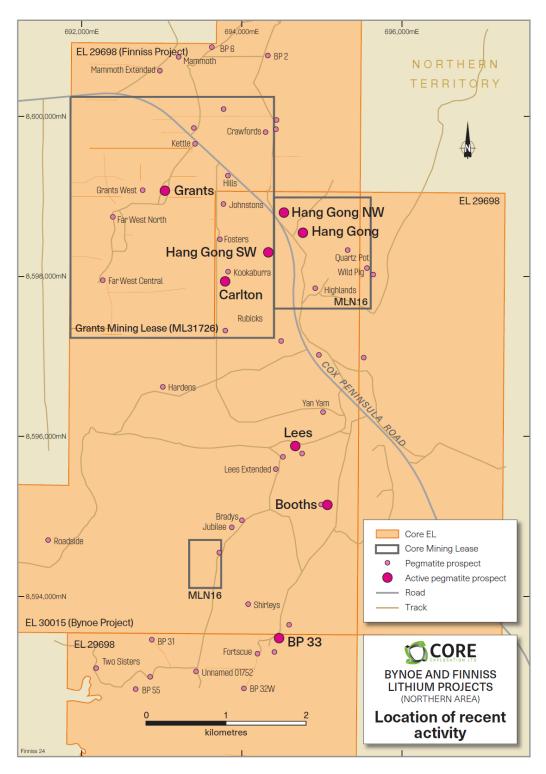


Figure 4. Recent exploration and drilling at pegmatite prospects within Bynoe and Finniss Lithium Projects, near Darwin in the NT.





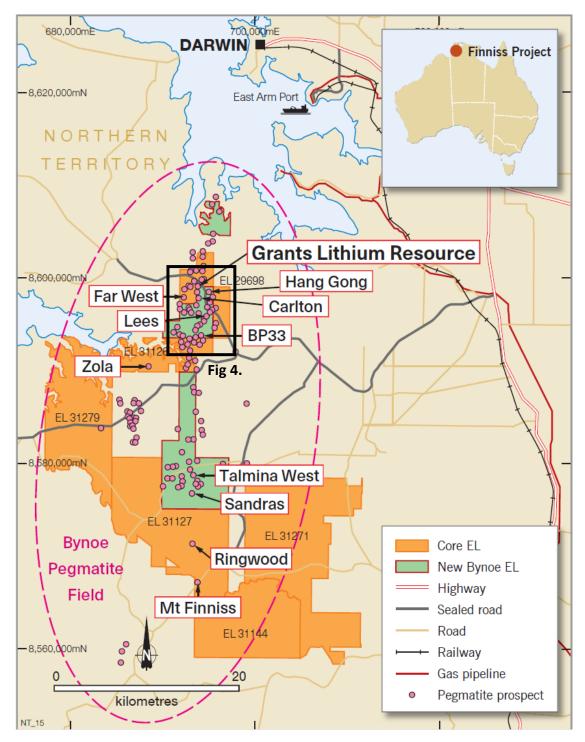


Figure 5. Pegmatite prospects within the Finniss and Bynoe Lithium Projects near Darwin, NT





Hole No.	ole No. Grid Co-ordinates GDA94			Surv	ey Data		Significant intercepts.				
	East	North	RL (m)	Azi. (°)	Dip (°)	Depth (m)		From (m)	To (m)	Interval (m)	Grade (Li2O %)
FMRD002	694545	8593502	13	313	-65	176.9		98	119	21.0	0.78
							including	106	114	8.0	1.38
FMRD003	694530	8593452	13	313	-65	194.9		138	187	49.0	1.02
							including	152.4	155	2.7	1.89
							including	169	172	3.0	2.18
FRC106	694572	8593600	14	183	-60	119.0	No Signific	ant Intercepts			
FRC107	694515	8593605	15	140	-62	137.0	No Signific	ant Intercepts			
FRC108	694426	8593549	16	131	-66	172.0		105	106	1.0	0.41
							and	120	122	2.0	0.95
							and	135	171	36.0	1.61
							including	143	149	6.0	2.12
							including	156	170	14.0	2.05
FMRD004	694489	8593426	20	313	-65	186.0	Awaiti	ng assays			
FMRD005	694356	8593470	20	135	-65	125.8	Awaiti	ng assays			
FRCD007	694371	8593529	17	135	-65	196.0	Awaitii	ng assays			

⁽i) Mean grades have been calculated on a 0.4% Li2O lower cut-off grade with no upper cut-off grade applied, and maximum length of consecutive internal waste of 3.0 metres.

Table 1. Drill assay results from diamond core and RC drilling at BP33 in Dec 2017 / Feb 2018.





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 results reported herein relate to RC drillholes at the BP33 Prospect on ELs 29698 and 30015 RC holes FRC106 to FRC108 were drilled by Core in December 2017. DDH holes FMRD002 and FMRD003 were also drilled in December 2017. Additional DDH holes FMRD004, FMRD005 and FRCD007 were drilled during January and February 2018, but assays not yet received. 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 (see Section). Core's RC drill spoils are collected into two sub-samples: 1 metre split sample, homogenized and cone split at the cyclone and then calico-bagged. Usually these weigh 2-3 kg. 30-40 kg primary sample is collected in green bags and retained until assays have been returned and deemed reliable for reporting purposes. The companies DDH core samples are quarter core, cut longitudinally along a consistent line between 0.3m and 1m in length.
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.). 	Drilling technique used by Core and reported herein comprises: standard Reverse Circulation (RC) 4 and ¾ inch face sampling hammer (5.5 inch diameter bit). The rig used is a multipurpose wheel mounted UDR1000 and running a 1600 CFM 500 psi compressor/booster combo. The rig is operated





		by WDA Drilling Services, Humpty Doo NT. Standard track-mounted DDH rig using HQ core assembly (triple tube), drilling muds or water as required, wireline setup. The rig is operated by WDA Drilling Services, Humpty Doo NT.
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 by Core for each metre.
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. 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. 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.
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. 	 RC samples referred to in this report have been collected on a 1m-basis utilising the cone splitter mounted under the drill rig's cyclone. Where the sample was too wet for the cone splitter to operate, 1m samples were collected from the 1m bulk bags using a spear. The type of sub-sampling technique and the quality of the sub-sample was





	 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. 	 recoded for each metre. The quality of the samples was assessed prior to their inclusion in calculated interval averages. Quarter Drill Core sample intervals were constrained by geology, alteration or structural boundaries, intervals varied between a minimum of 0.3 metres to a maximum of 1 m.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	 Sample prep occurs at North Australian Laboratories, Pine Creek, NT. DDH samples are crushed to a nominal size to fit into mills. DDH crushed material and RC Samples are then prepared by pulverising in Steel Ring Mill to 95% passing -100 um. A 0.3 g sub-sample is then digested in a standard 4 acid mixture and analysed via ICP-MS and ICP-OES methods for the following elements: Li, Cs, Rb, Sr, Nb, Sn, Ta, U, As, K, P and Fe. The lower and upper detection range for Li by this method are 1 ppm and 5000 ppm respectively. For any sample reporting above 3000 ppm Li, a trigger is set to process that sample via a fusion method. For this, a 0.3 g sub-sample is fused with a Sodium Peroxide Fusion flux and then digested in 10% hydrochloric acid. ICP-OES is used for the following elements: Li, P and Fe. The lower and upper detection range for Li by this method are 10 ppm and 20,000 ppm respectively. A barren flush is inserted between samples at the laboratory. The laboratory has a regime of 1 in 8 control subsamples. NAL utilise standard internal quality control measures including the use of Certified Lithium Standards and duplicates/repeats. CXO-implemented quality control procedures include: One in 20 certified Lithium ore standards are used for this drilling. One in 20 duplicates are used for this RC samples. DDH core is too heterogeneous to utilise duplicates. Repeatability is tested in due





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. 	course via coarse reject Umpire preparation/analysis. One in 20 Blanks were used in this program. External laboratory checks will be completed in due course. 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. Metallic Lithium percent was multiplied by a conversion factor of 2.15283/10000 to report Li ppm as Li ₂ O%
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. 	 Core's Drilling: All coordinate information was collected using hand held GPS utilizing GDA 94, Zone 52. RC hole traces were surveyed by north seeking Champ gyro tool (multishot mode at 5m and 10m intervals) 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 good to moderate for RC holes reported here and excellent for DDH holes, and is acceptable for resource drilling.
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. 	 Drill collars are spaced approximately 50m apart along the northeasterly trending pegmatite body of BP33. This data may be used to support a resource. Refer to figures in report. Sample compositing reported here are calculated length weighted averages of the assays. Length weighted averages are acceptable method because the density of the rock (pegmatite) is constant.
Orientation of data in	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit	Core's drilling is oriented perpendicular to the interpreted strike of mineralization (pegmatite body) as mapped or predicted by the geological





relation to geological structure	type. If the relationship between the drilling orientation mineralised structures is considered to have introd should be assessed and reported if material.	
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 ted	• Audits or reviews of the sampling techniques were not 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. 	 Drilling by Core at BP33 on what is now ELs 29698 and 30015 that are 100% owned by Core, the latter via a recent sale agreement (ASX Release 14 Sept 2017). The area being drilled comprises Vacant Crown land There are no registered heritage sites covering the areas being drilled. The tenements are in good standing with the NT DPIR Titles Division.
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 tantalite from its Observation Hill Treatment Plant between 1986 and 1988. An abandoned open cut to 10m depth remains at BP33. 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 cover the northern portion of a swarm of complex zoned rare element pegmatite field, which comprises the 55km long by 10km wide West Arm – Mt Finniss pegmatite belt (Bynoe Pegmatite Field; NTGS Report 16). The main pegmatites in this belt include Mt Finniss, Grants, BP33, Hang Gong and Sandras The Finniss pegmatites have intruded early Proterozoic shales, siltstones and schists of the Burrell Creek Formation which lies on the northwest margin of the Pine Creek Geosyncline. To the south and west are the granitoid plutons and pegmatitic granite stocks of the Litchfield Complex. The source of the fluids that have formed the intruding pegmatites is generally accepted as being the Two Sisters Granite to the west of the belt,





		 and which probably underlies the entire area at depths of 5-10 km. Lithium mineralisation has been identified as occurring at Bilato's (Picketts), Saffums 1 (amblygonite) and more recently at Grants, 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 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. 	Refer Figures and Tables in Report.
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 Sample compositing reported here are calculated length weighted averages of the assays. Length weighted averages are acceptable method because the density of the rock (pegmatite) is constant. 0.3% Li₂O was used as lower cut off grades for compositing with allowance for including up to 3 m of consecutive drill material of below cut-off grade (internal dilution).
Relationship between	These relationships are particularly important in the reporting of Exploration Results.	The oblique nature of drillholes with respect to geology is discussed above. Because of the dip of the hole, drill intersections are apparent thicknesses.





mineralisation widths and intercept lengths	 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'). 	and overall geological context is needed to estimate true thicknesses. Refer figures in report
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. 	Exploration results are discussed in the report and shown in figures.
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. All meaningful and material data reported.
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 has just completed a Diamond core drilling program at BP33, as outlined in this report. Further assays will be returned in due course. In the coming dry season, further RAB drilling, RC and Diamond core drilling is on-going or planned in this area to define additional targets at BP33 and extensions to the north and south.