ASX Code: MRR

30 May 2022 ASX Release

NEW LARGER PEGMATITES IDENTIFIED OVER TAMBOURAH NORTH IN EAST PILBARA

Upcoming RC drilling planned to test the newly defined pegmatites

HIGHLIGHTS

- **New mapping identifies new and larger Pegmatites hosting visible Spodumene and Lepidolite over the Tambourah North Lithium Project area.**
- **Central-Northern Zone Pegmatite *(MRR028 2.56% Li_2O, 1.19% Li)* covers an area of 300m in length by 310m in width and comprises series of stacked pegmatites hosted with the Greenstone Belt within untested drill target zone.**
- **Central-Northern Zone geological mapping shows main pegmatites striking 45^0 cutting the Apex Basalt, varying from 50m to 280m in length and up to 30m in width in some zones, with spodumene mineralisation confirmed from rock chip sampling.**
- **Southern Zone Pegmatite *(MRR040 1.91% Li_2O, 0.89% Li)* covers an area of 870m in length by 170m in width and comprises stacked pegmatites hosted with the Granite-Greenstone Belt within untested drill target zone.**
- **Southern Zone geological mapping shows multiple stacked sheeted pegmatites (following orientation of the granite-greenstone contact), ranging from 40m to 250m in length and up to 15m wide, with visual lepidolite veins cross-cutting main pegmatites.**
- **Drilling program designed to test new and pre-existing target areas, with approved PoW received for drilling to commence in late July 2022.**

MinRex Resources Limited (**ASX: MRR**) ("**MinRex**" or "the **Company**") is pleased to provide further details of the recent geological mapping programme completed on its Tambourah North Lithium Project in the East Pilbara of WA.

The results have validated previously reported lithium mineralisation from MinRex's initial rock chip program which yielded high grade lithium-tantalum-rubidium mineralisation (refer to *ASX Release of 11 April 2022, "Outstanding Lithium Assays at MinRex Tambourah North Lithium Project, East Pilbara").*

MinRex Resources Limited Managing Director Mr Karageorge commented:

"We are delighted to have further ground confirmation of lithium mineralisation identified from outcropping pegmatites over the Tambourah North Project areas. These rich spodumene-lepidolite stacked sheeted pegmatites have extensive width, strike and zonation which have all the hallmarks of a potential Pilgangoora Lithium Deposit".

Now that the WA Department of Mines, Industry, Resources and Safety have approved MinRex's application to drill, the Company is currently working on the first maiden RC drillhole program to test the extensive stacked pegmatites over its 100% owned project."

Tambourah North Lithium Project

Tambourah is located approximately 200 km south southeast of Port Hedland and 80km southwest of Marble Bar within the Pilbara Mineral Field. Access is via the Great Northern Highway or the Marble Bar – Port Hedland Road and the connecting Hillside - Woodstock Road.

As already announced by the Company (refer to *ASX Release of 26 May 2022, "MinRex Calls Up Drill Rigs as Approvals Received for Maiden Drilling Over Lithium Projects in East Pilbara"*) the recent geological mapping programme identified a series of stacked pegmatites in the central-northern area of E45/4953. Spodumene rich pegmatites are completely hosted with the Apex Basalt, which is part of the greenstone belt. These pegmatites identified vary from 50m to 280m in length with some pegmatites up to 30m in width.

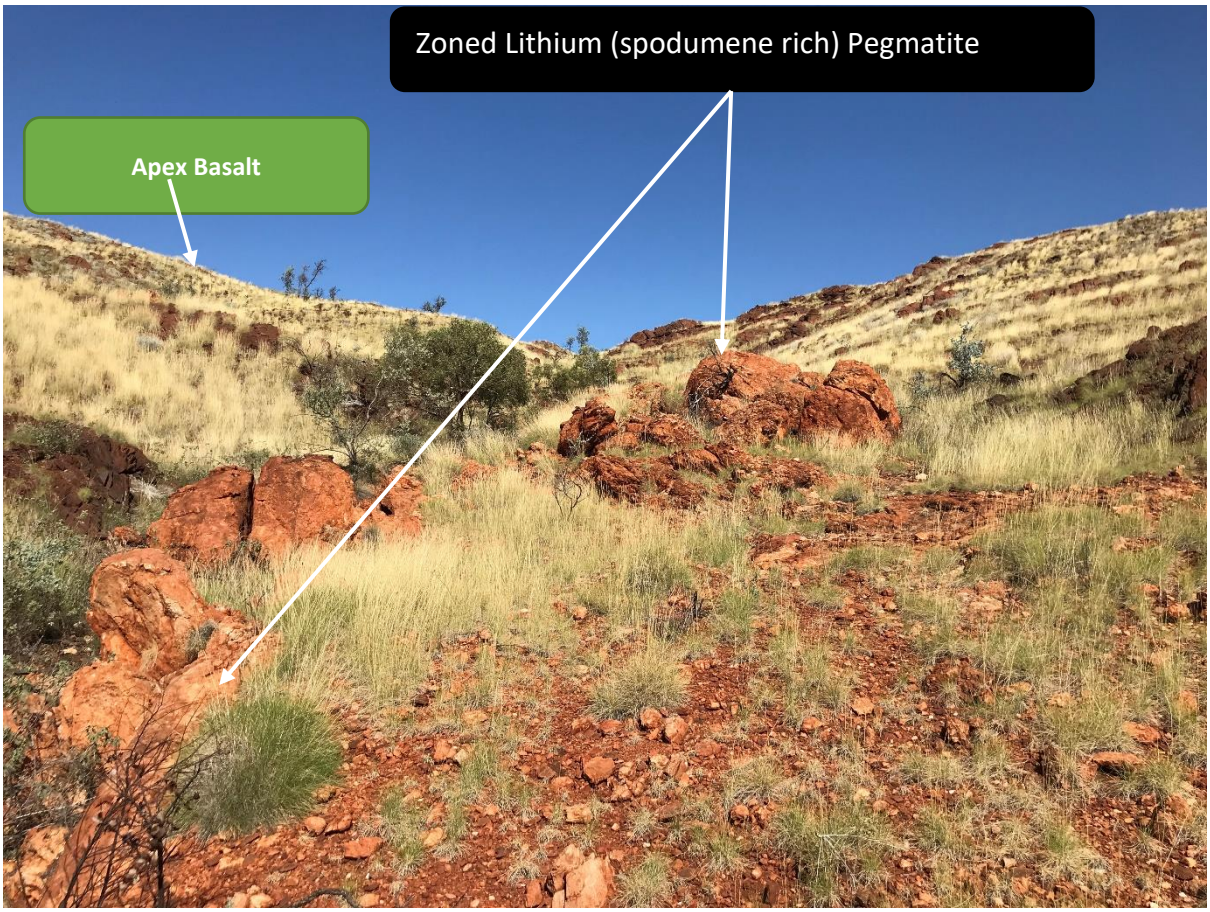

Photo 1 – Tambourah North (Central-North Zone) highlighting stacked series of pegmatites striking over 280m in length hosted with the Apex Basalt (deep brown foliated rock within foreground/background).

Geological mapping has further identified a stacked series of lepidolite-albite-muscovite rich pegmatites southern zone area of E45/4953 on the contact zone between the Petroglyph Gneiss (granite lithology) and Apex Basalt, which is part of the greenstone belt. These pegmatites follow the same orientation of the granite-greenstone for approximately 830m in length with individual pegmatites ranging from 40m to 250m in length. Some of the pegmatites range from 0.5m to 15m in width with some lepidolite pegmatite veins cross cutting the main pegmatites.

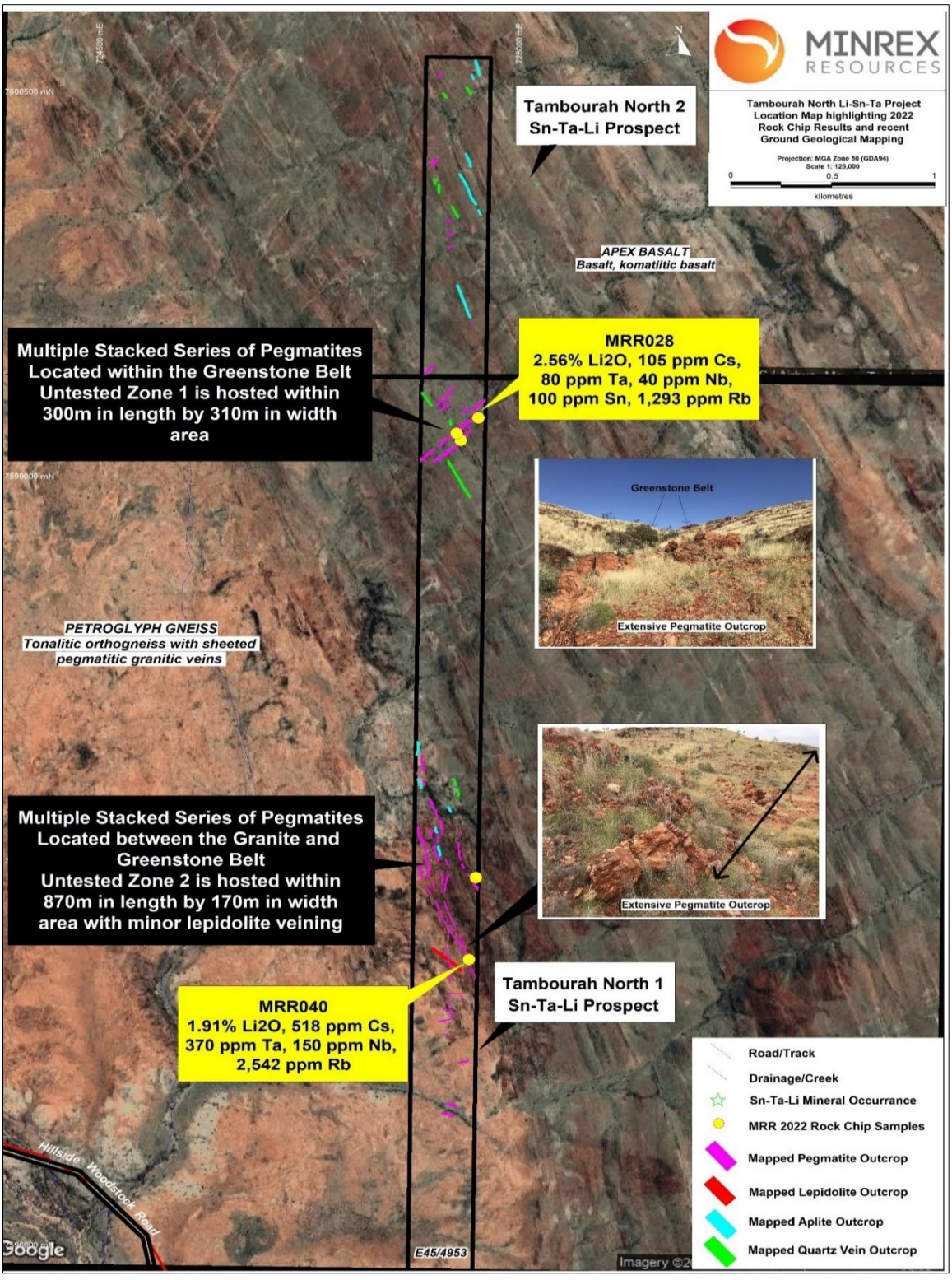

Figure 1 – Tambourah North Project highlighting the recent identification of Pegmatites

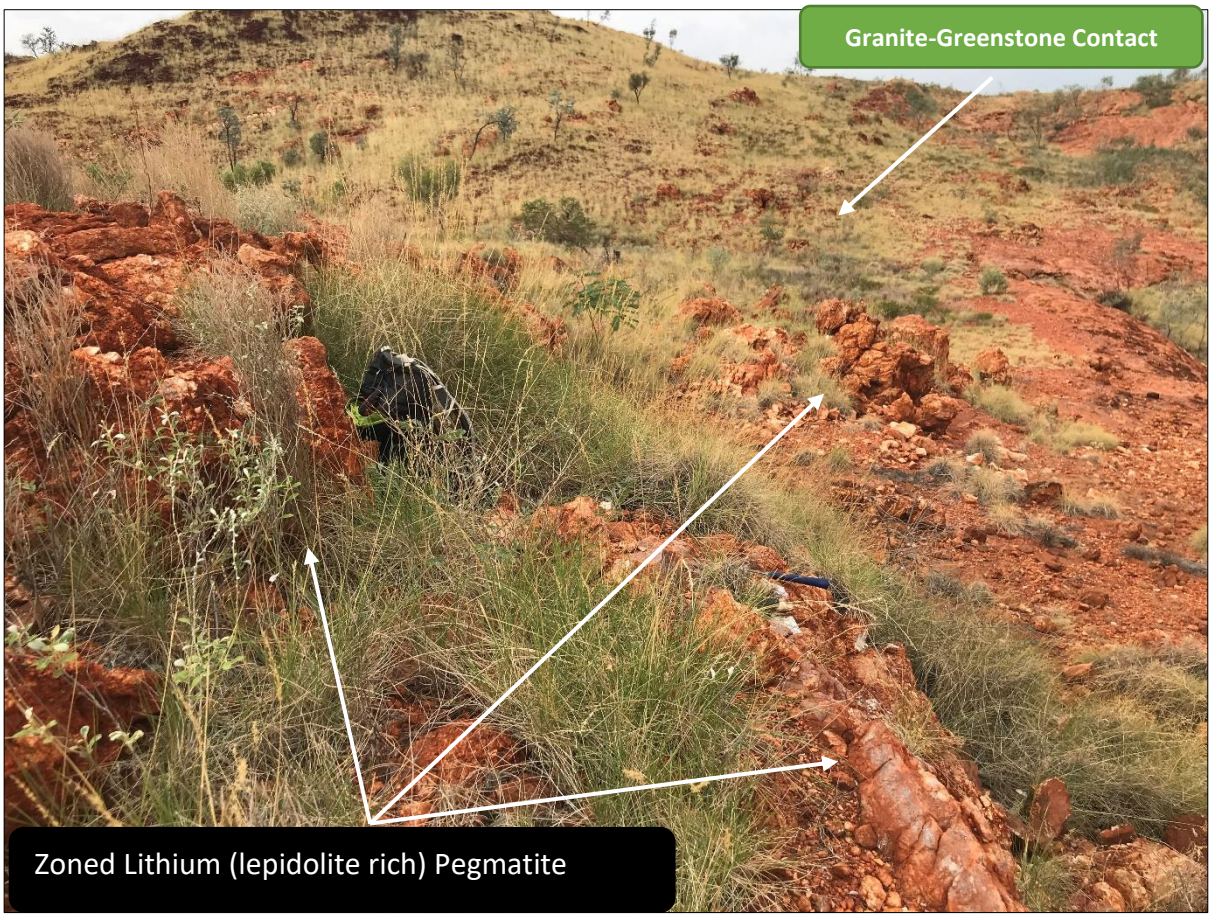

Photo 2 – Tambourah North (Southern Zone) highlighting stacked series of pegmatites hosting lithium rich over 820m in length (lepidolite purple colour hosted within the Greenstone-Granite Contact zone)

Forward Strategy

The Company has designed its maiden RC drill programme over Tambourah North to test new and pre-existing target areas.

The first pass RC drill programme will target an area of 300m in strike by 310m in width in the central-northern area of Tambourah North - this will test the spodumene rich stacked pegmatites in the along strike and at depth.

The second drill target zone will concentrate drilling over an area of 870m in strike by 170m in width in the southern target area of Tambourah North to test the newly identified lepidolite rich stacked pegmatites along strike and depth.

Further details will be announced to shareholders in due course.

This ASX announcement has been authorised for release by the Board of MinRex Resources Limited.

-ENDS-

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About MinRex Resources Ltd

MinRex Resources Limited (ASX: MRR) is an Australian based ASX-listed emergent battery metals explorer with Lithium-Tin-Tantalum Projects in the Pilbara (WA) in close proximity to world-class Lithium and Tantalum producers Pilbara Minerals, Mineral Resources, and Global Lithium. MinRex also has a highly prospective portfolio of Gold-Copper projects in the Mercherson and Pilbara Regions (WA) and Gold-Silver-Copper and other metals projects in the Lachlan Fold Belt (NSW). The Company's tenements package cover 1,000km^2 of highly prospective ground targeting multi-commodities type deposits. The Company also currently has JORC 2012 Resources totalling 352,213 oz gold at its Sofala Project (NSW).

Competent Persons Statement

The information in this report that relates to Exploration Targets and Exploration Results is based on information compiled by Ian Shackleton. Mr. Shackleton is the Non-Executive of MinRex Resources Limited and is a Member of the AIG of whom have sufficient experience relevant to the styles of mineralisation under consideration and to the activity being reported 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. Shackleton has verified the data disclosed in this release and consent to the inclusion in this release of the matters based on the information in the form and context in which it appears.

Forward Statement

This release includes forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning MinRex's planned exploration programs and other statements that are not historical facts. When used in this release, the words such as "could", "plan", "estimate", "expect", "anticipate", "intend", "may", "potential", "should", "might" and similar expressions are forward-looking statements. Although MinRex believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve known and unknown risks and uncertainties and are subject to factors outside of MinRex's control. Accordingly, no assurance can be given that actual results will be consistent with these forward-looking statements.

Appendix 1

JORC Code, 2012 Edition – Table 1 report

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.*	N/A - Geological mapping programme
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).*	N/A – No drilling was undertaken
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.*	N/A – No drilling was undertaken
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.*	N/A – No drilling was undertaken. The Project areas is currently classified as early stage of exploration and no Mineral Resource estimation is appliable Some sample photos have been included along with outcropping pegmatites.
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.*	N/A - Geological mapping programme

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.*	N/A - Geological mapping programme
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.*	N/A - Geological mapping programme
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 photo locations were recorded with a handheld GPS with +/- 5m accuracy GDA94, Zone 50 was used
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.*	N/A
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.*	N/A
Sample security	*The measures taken to ensure sample security.*	N/A
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	N/A

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.*	Tambourah North (E45/4953) is 100% held by MinRex Resources Ltd.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	Very little lithium exploration has been undertaken over these project areas. No ground geophysics and very little

Criteria	JORC Code explanation	Commentary
		geological mapping has been historically completed.
Geology	*Deposit type, geological setting, and style of mineralisation.*	The deposit types been explored includes the Archer Lithium Deposit and Pilgangoora pegmatite deposits.
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.*	N/A no drilling undertaken
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.*	N/A
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').*	N/A
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.*	N/A - Geological mapping programme
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.*	N/A
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.*	N/A
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.*	Refer to the main body of announcement