

17 December 2021

ASX RELEASE

AUGER GEOCHEMISTRY IDENTIFIES 2.4km LITHIUM-CEASIUM-TANTALUM GEOCHEMICAL ANOMALY - WEST SPARGOVILLE EXPLORATION UPDATE

HIGHLIGHTS:

- **First auger results highlight a 2.4 kilometre long Li-Cs-Ta-Nb (lithium-caesium-tantalum-niobium) anomaly identified within the Project area (Figure 1).**
- **The results reaffirms the Company's interpretation that there exists the significant potential to identify lithium bearing, LCT (lithium-caesium-tantalum) Pegmatites.**
- **Geochemical anomaly associated with prominent NW-trending structural zone.**
- **The geochemical anomaly identified is situated in an ideal location from a mineral systems perspective with geological similarities to the nearby Dome North lithium project (Refer ASX: ESS ASX Announcement 22nd Oct 2021).**
- **First 748 results of a 3,146 hole auger program returned with all samples now at the lab.**
- **Follow-up drill testing of high priority targets is expected to commence 1Q22.**

Marquee Resources Limited ("Marquee" or "the Company") (ASX:MQR) is pleased to provide an update on exploration works at the West Spargoville Project (WSP). After recent drilling and geological review of the West Spargoville Project, it was recognised that there exists the significant potential to identify lithium bearing, LCT (lithium-caesium-tantalum) Pegmatites within the Project area (refer ASX Release dated 31st August 2021).

The Company has received results from the first batch of assays following completion of a 3,146 hole auger geochemistry program. The results have identified a 2.4 kilometre long Li-Cs-Ta-Nb anomaly associated with a prominent northwest trending structural zone. Importantly, the geochemical anomaly is situated in an ideal location from a mineral systems perspective, 4 kilometres from the margin of the Connolly Gneiss and within the hypothesized 'Goldilocks Zone'. The geochemical anomaly was identified in an area devoid of outcrop with the underlying Black Flag Bed sediments, the host unit to the nearby Dome North lithium project (Refer ESS Quarterly dated 22nd Oct 2021), obscured by transported overburden.

A further three batches of assays are at the lab with results expected to be finalised early in the new year. After the recent DGPR results (Refer ASX Release dated 8th Dec 2021) the results from the auger geochemistry sampling program will further enhance the Company's understanding of the lithium potential of the Project. The Company aims to complete follow-up drill testing of high priority targets in the first quarter of 2022.

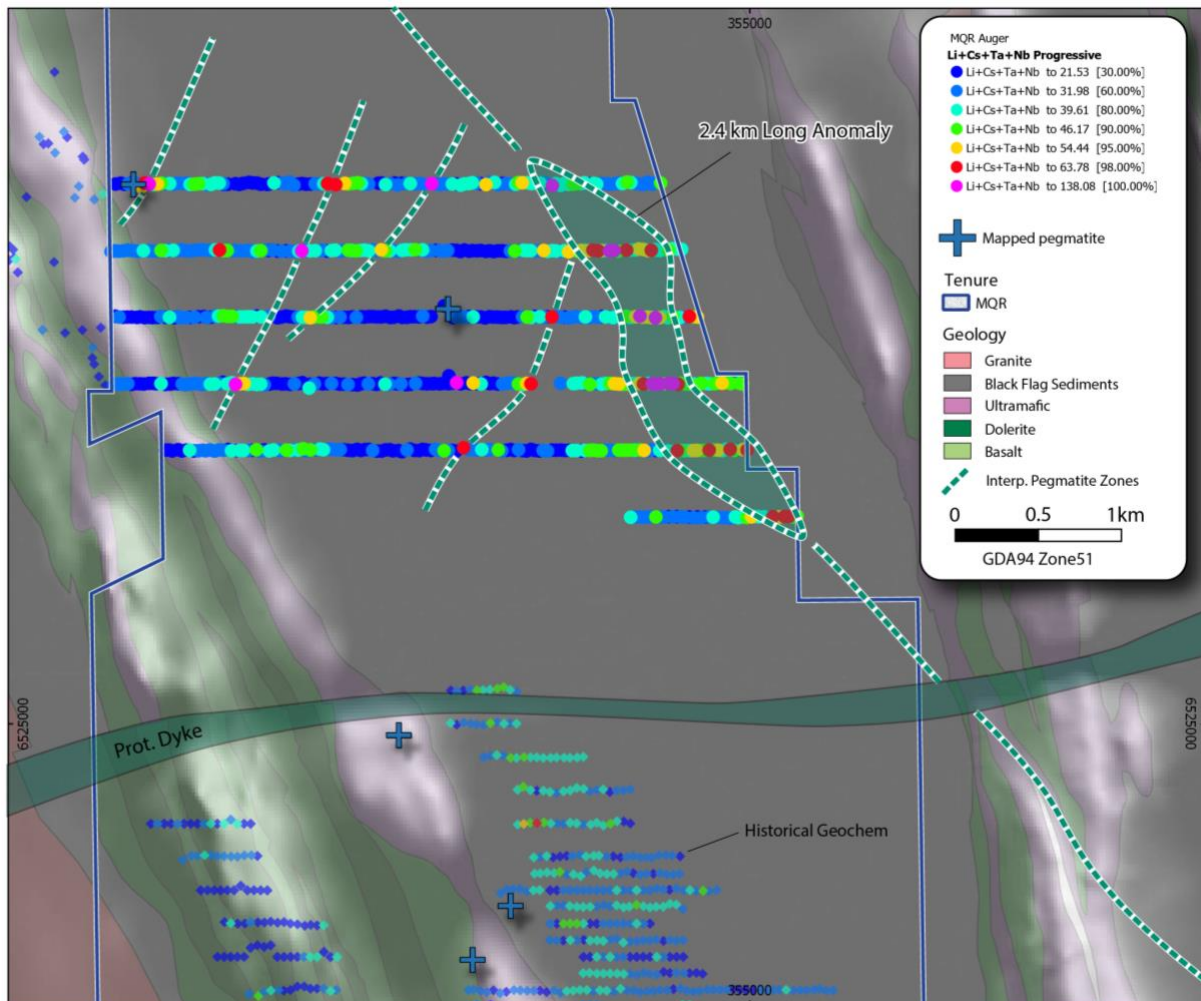


Figure 1: First results from auger geochemistry at WSP.

Executive Chairman Comment:

Marquee Executive Chairman, Mr Charles Thomas, commented: “It’s exciting to get the first batch of samples back from the lab and identify a previously unrecognised soil anomaly. Particularly given the anomaly is associated with a prominent structural zone that can be tracked to the southeast and was identified in an area covered by transported clays and soils. This is in addition to the targets identified in the DGPR data which will be covered in the rest of the auger geochemistry results.”

“Much of the focus historically has been on the western half of the Project where abundant outcrop makes mapping and sampling easy, however the auger results are in line with the hypothesis that undercover and distal from the granitoid margin is more geologically favourable for the development of lithium-rich pegmatites. As more results continue to come to light, our understanding of the Project grows and the Company is perfectly positioned to drill test some exciting targets early in the new year.”

Initial Results from Auger Geochemistry Completed at the West Spargoville Project

Auger geochemical sampling is a first pass exploration technique used to test for surficial anomalism that may indicate the presence of underlying, ore-grade mineralisation. In the Yilgarn Craton, auger geochemistry is a particularly effective targeting technique in areas covered by a thin veneer transported overburden that

masks the underlying, Archean aged mineralisation. Results from the first 748 auger geochemical samples has highlighted a 2.4 kilometre long, NW trending geochemical anomaly that is associated with a prominent structural zone that can be traced in magnetics data (Figure 1). The anomaly sits towards the eastern edge of the Project area, approx. 4 kilometres from the margin of the Connolly Gneiss, where no mapping or sampling has been completed historically due to the lack of outcrop. The NW structural orientation is interpreted to represent a conjugate fault array associated with the previously recognized NE-trending, mapped pegmatites.

In the Yilgarn Craton, pegmatites are located within 10 kilometres of a common granitic source with proximal pegmatites the least evolved and poorly mineralized, containing only the general rock-forming minerals. More distal and evolved pegmatites may include beryl, beryl and columbite, tantalite and Li aluminosilicates, and pollucite in the most evolved pegmatites (Figure 2). The spatial zonation of pegmatites around a common granitic source is a fundamental starting point for exploration models (London, 2018). In these Archean settings, regional-scale structures control the distribution of pegmatites, being responsible for focusing and transporting fluids and magmas.

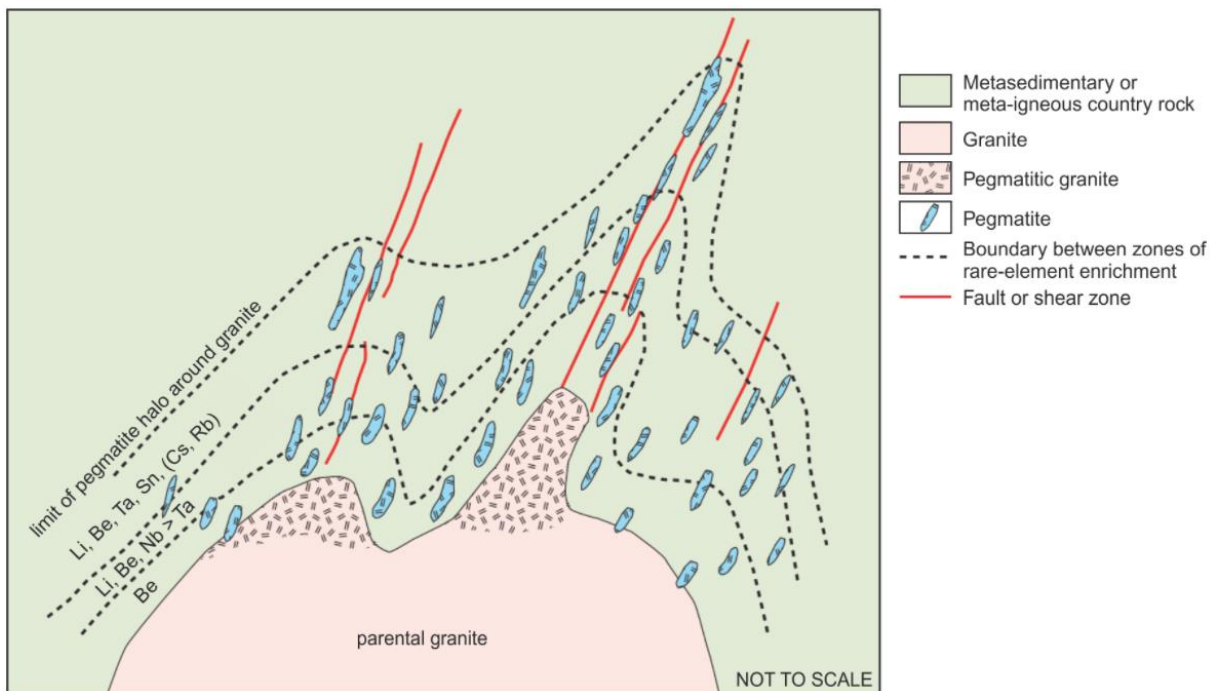


Figure 2: Schematic model that shows regional zoning patterns in a pegmatite field (from Bradley et al., 2017)

Exploration Update

3,149 auger samples were collected over the southern portion of the West Spargoville Project and all samples have been delivered to the laboratory for analysis. Final results of the auger geochemistry program are expected early in 2022. Once final results have been received and interpreted, in conjunction with recently acquired DGPR data, the company intends to drill test high priority targets in the Q1 of 2022.

The West Spargoville Project

The West Spargoville Project is located in the core of the Southern Yilgarn Lithium Belt, an area that is well known for spodumene deposits that include; the Bald Hill Mine, the Mt Marion Mine, the Buldania Project and Essential Metals Pioneer Dome Project. The world-class Earl Grey deposit and the Mt Cattlin Mine are located further west and south respectively (Figure 3). Marquee entered into an Option Agreement to

acquire the West Spargoville project (refer ASX Release dated 7th July 2020 and 23rd August 2021) which consists of 80km² of highly prospective tenure with very limited drilling historically completed on the Project.

Northeast trending structures are the primary structural control on the location of pegmatites at the West Spargoville Project with high-grade lithium bearing pegmatites (refer MXR ASX Release dated 15 Sept 2016) and recently mapped pegmatites situated along these structures, as observed in magnetics data (**Error! Reference source not found.**). This structural trend is analogous to the orientation of spodumene bearing pegmatites at the Dome North Project 40km to the south (Refer ESS ASX Release dated 19 July 2021).

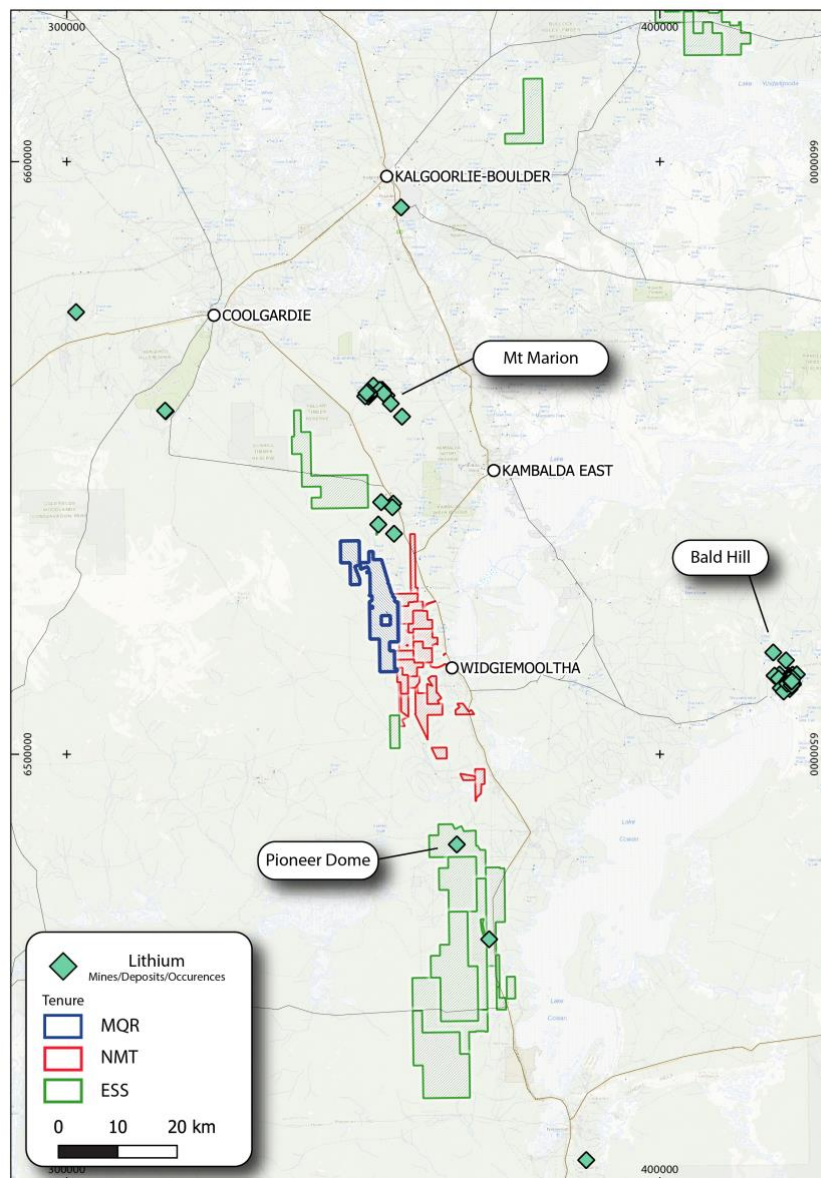


Figure 3: West Spargoville Project location

References

Bradley, DC, McCauley, AD and Stillings, LL 2017, Mineral-deposit model for lithium-cesium-tantalum pegmatites: United States Geological Survey, Reston, VA, Scientific Investigations Report 2010-5070, 58p.

London, D 2018, Ore-forming processes within granitic pegmatites: Ore Geology Reviews, v. 101, p. 349–383, doi:10.1016/j.oregeorev.2018.04.020.

COMPETENT PERSON STATEMENT

The information in this report which relates to Exploration Results is based on information compiled by Dr James Warren, a Competent Person who is a member of the Australian Institute of Geoscientists. Dr Warren is the Chief Technical Officer of Marquee Resources Limited. Dr Warren has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the “Australian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Dr Warren consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

Forward Looking Statements

Statements contained in this release, particularly those regarding possible or assumed future performance, costs, dividends, production levels or rates, prices, resources, reserves or potential growth of Marquee Resources Limited, are, or may be, forward looking statements. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. Actual results and developments may differ materially from those expressed or implied by these forward-looking statements depending on a variety of factors.

This ASX Release has been approved by the Board of Directors.



Charles Thomas – Executive Chairman
Marquee Resources
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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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Auger soil sampling is a reconnaissance stage technique and offers only an indication of the tenor of underlying mineralisation. Auger soil samples were taken from drilled spoil, scooped by hand from the top of the spoil pile to represent end of hole material. Samples were sieved to 2mm and 1-2kg of material was collected in numbered calico bags. Sample preparation and laboratory analysis was undertaken at LabWest Minerals Analysis Pty Ltd, Perth, Western Australia. Samples were dried, crushed (~2mm) and rotary divided where required. Pulverisation to 85% passing 75 microns is undertaken by LM1 mill, and bowls are barren-washed after each sample. For gold analysis (WAR-25); A 25g portion of pulverised sample is analysed for gold content using aqua-regia digestion, with determination by ICP-MS to achieve high recovery and low detection limits (0.5ppb). For 64 element geochemical analysis (MMA-04); the MMA technique is a microwave-assisted, HF-based digestion that effectively offers total recovery for all but the most refractory of minerals. A portion of sample is digested in an HF-based acid mixture under high pressure and temperature in microwave apparatus for analysis, with determination of 64 elements including Rare-Earths by a combination of ICP-MS and ICP-OES.
Drilling techniques	<ul style="list-style-type: none"> 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). 	<ul style="list-style-type: none"> Auger holes were drilled vertically down to a maximum depth of 1.5m with the average hole depth of approx. 1m Auger diameter was 300 mm.
Drill sample recovery	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Auger sample recoveries are considered to be 100%. Some sample bias may have occurred during augering through sandy soils, in which material may have fallen into the hole and diluted the

Criteria	JORC Code explanation	Commentary
	<p>samples.</p> <ul style="list-style-type: none"> • 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. 	<p>end of hole sample.</p>
Logging	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Samples were qualitatively logged with colour, and lithology of end of hole material.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • All company samples submitted for analysis underwent drying and were pulverized to 85 % passing 75 microns each, from which a 0.25 g charge was taken for four-acid digest and ICP analysis. • This sample preparation technique is considered appropriate for the type and tenor of mineralisation. • The laboratory inserted certified reference material and blanks into the analytical sequence and analysed lab duplicates. These appear to confirm accuracy and precision of the sample assays.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Assaying was completed by Labwest Minerals Analysis Pty Ltd, 10 Hod Way, Malaga WA 6090. • For gold analysis (WAR-25); A 25g portion of pulverised sample is analysed for gold content using aqua-regia digestion, with determination by ICP-MS to achieve high recovery and low detection limits (0.5ppb). • For 64 element geochemical analysis (MMA-04); the MMA technique is a microwave-assisted, HF-based digestion that effectively offers total recovery for all but the most refractory of minerals. A portion of sample is digested in an HF-based acid mixture under high pressure and temperature in microwave apparatus for analysis, with determination of 64 elements including Rare-Earths by a

Criteria	JORC Code explanation	Commentary
	<i>levels of accuracy (ie lack of bias) and precision have been established.</i>	combination of ICP-MS and ICP-OES from the historical reports.
Verification of sampling and assaying	<ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> • This release refers to the first 748 results of a recently completed 3,146 hole auger program. • Data was recorded digitally and in hard copy by on-site Company field staff. • All field data is directly recorded in hard copy, then sent electronically to the Chief Technical Officer in the office. Assay files are received electronically from the Laboratory. All data is stored in an Access database system, and maintained by the Database Manager • All results have been collated and checked by the Company's Chief Technical Officer.
Location of data points	<ul style="list-style-type: none"> • <i>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.</i> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> • The coordinate system used is MGA_94 Zone 51. • A handheld GPS was used to record the position of the auger holes. Horizontal accuracy was +/- 3 metres. • Location accuracy at collars is considered adequate for this stage of exploration.
Data spacing and distribution	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>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.</i> • <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> • Company auger hole spacing was approximately 25 metres along 400 metre-spaced lines. • The spacing is appropriate for this stage of exploration. • The samples are not appropriate for Mineral Resource estimation.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • The stratigraphy within the Project area strikes NNW while interpreted pegmatite dykes strike NE and NW. • Samplings was completed on east-west oriented lines, roughly perpendicular to the stratigraphy and the interpreted orientation of pegmatites
Sample security	<ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> • Company samples were kept by the company representatives and submitted directly to the laboratory.

Criteria	JORC Code explanation	Commentary
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> No audits or reviews beyond consultant geologists have been conducted on the exploration data.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> 	<ul style="list-style-type: none"> The auger drilling occurred on granted tenement E15/1743. Marquee entered into an Option Agreement to acquire the tenement (refer ASX Release dated 7 July 2020) and undertake exploration on the project. The tenement is in good standing.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> The area has been subject to historical gold prospecting with several deposits located and mined within the region. The extensive publicly available surface geochemistry database consists of approximately five-thousand data points, within the Project area, made up of predominantly auger soil samples, however less than 10% of the samples were assayed for lithium. By contrast, historical drilling completed within the Project area consists of only 123 wide-spaced RAB holes, with an average depth of 43m, and 16 reverse-circulation drill holes, with an average depth of 78m.
<i>Geology</i>	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> Regionally the geology is dominated by Archean mafic/ultramafic and sedimentary lithologies intruded by granites and pegmatite dykes. Lithium mineralisation associated with LCT Pegmatites is being targeted by the exploration.
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <i>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:</i> <ul style="list-style-type: none"> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i> <i>down hole length and interception depth</i> 	<ul style="list-style-type: none"> This information is not relevant due to the effectively surficial nature of the sampling programme and early stage of exploration.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> ○ hole length. ● <i>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.</i> 	
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> ● <i>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.</i> ● <i>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.</i> ● <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> ● No data aggregation methods have been used.
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> ● <i>These relationships are particularly important in the reporting of Exploration Results.</i> ● <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> ● <i>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').</i> 	<ul style="list-style-type: none"> ● The type of sampling reported in this release has no ability to indicate potential widths of mineralisation.
<i>Diagrams</i>	<ul style="list-style-type: none"> ● <i>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.</i> 	<ul style="list-style-type: none"> ● See Figure 1
<i>Balanced reporting</i>	<ul style="list-style-type: none"> ● <i>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.</i> 	<ul style="list-style-type: none"> ● Due to the nature of the sampling, the results are to be considered indicative only and not material. ● The ASX release is considered to represent balanced reporting. Further evaluation of these results is ongoing.

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All available geological, geophysical and geochemical data has been integrated and interpreted by company geologists. All auger soil samples have been shown in Figure 1.