

## Commencement of Auger Geochemistry, Outcropping Pegmatites Identified During DGPR

Marquee Resources Limited (“Marquee” or “the Company”) (ASX:MQR) is pleased to provide an update on planned and ongoing 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 31<sup>st</sup> August 2021). The Company is embarking on a 3,000-hole auger program, to accompany the ongoing Deep Ground Penetrating Radar (DGPR) survey, aimed at delineating high priority lithium-bearing pegmatite targets for follow-up drill testing. By acquiring high quality, fundamental datasets, Marquee will systematically explore the West Spargoville Project in its search for the next discovery in a world-class spodumene district.

Ultramag Geophysics are currently on-site and are at the halfway point of a 58-line kilometre DGPR survey over the southern portion of the West Spargoville Project. While undertaking the ground-based survey, the field team are identifying and mapping any outcropping pegmatites to compliment the geophysical data acquisition (**Figure 1**). Rock samples will be sent to the lab for analysis and, along with results of the DGPR survey, the information will be used to refine the upcoming auger geochemistry program.



*Figure 1 - DGPR surveying and coarse-grained, prospective pegmatite from outcrop*

### Executive Chairman Comment:

Marquee Executive Chairman, Mr Charles Thomas, commented: “Some of the preliminary data coming out of the DGPR survey looks highly encouraging. This, coupled with the identification of outcropping pegmatites means we are growing in confidence by the day. We are in the very early stage of our lithium exploration efforts at the WSP and we are more than excited to complete this round of exploration with a view to drill testing some of these very exciting targets as soon as we can.”

### Overview of Exploration and Strategy at 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 2**).

Marquee entered into an Option Agreement to acquire the West Spargoville project (refer ASX Release dated 7<sup>th</sup> July 2020 and 23<sup>rd</sup> August 2021) which consists of 80km<sup>2</sup> of highly prospective tenure with very limited drilling historically completed on the Project.

After initial field reconnaissance with lithium expert Dr Qingtao Zeng and detailed review of all the available literature, geophysical and geochemical data, the Company has embarked on a methodical exploration strategy at the West Spargoville Project. The first phase has begun with a detailed DGPR survey and will be followed up with auger geochemistry which will commence this week. By collecting the fundamental data and understanding the science behind effectively targeting lithium-rich pegmatites, Marquee is arming itself with the knowledge required to identify the next discovery in a world class spodumene district. Upon completion of the first phase of exploration, the Company plans to drill test high-priority targets that emerge from the data.

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 (**Figure 3**). 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).

### Exploration Update

Ultramag Geophysics is at the halfway point of a 58-line kilometre DGPR survey and are expected to have finalised the data acquisition within a week. Preliminary processing of the DGPR data has begun, with results expected to be returned 1 week after completion of the survey.

Auger geochemical sampling is beginning this week with the location of observed pegmatites and preliminary results from the DGPR survey providing valuable information during the geochemical data acquisition process. Whole rock samples from outcropping pegmatites will be sent to the lab at completion of the DGPR mapping exercise, with auger samples to be sent to the lab in batches to generate results as the program progresses.

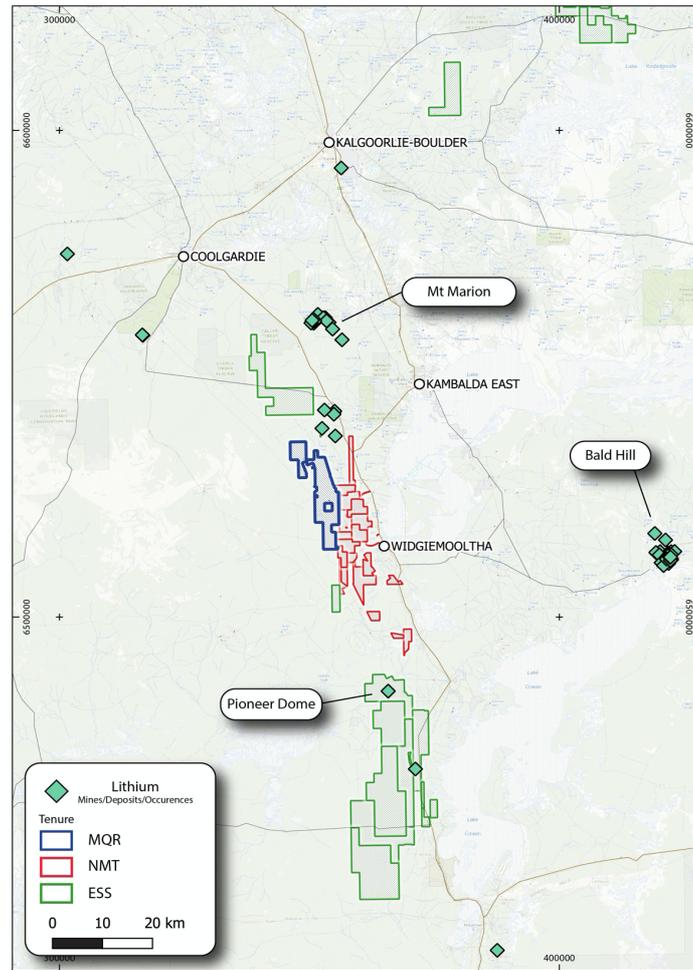


Figure 2 - West Spargoville Project location

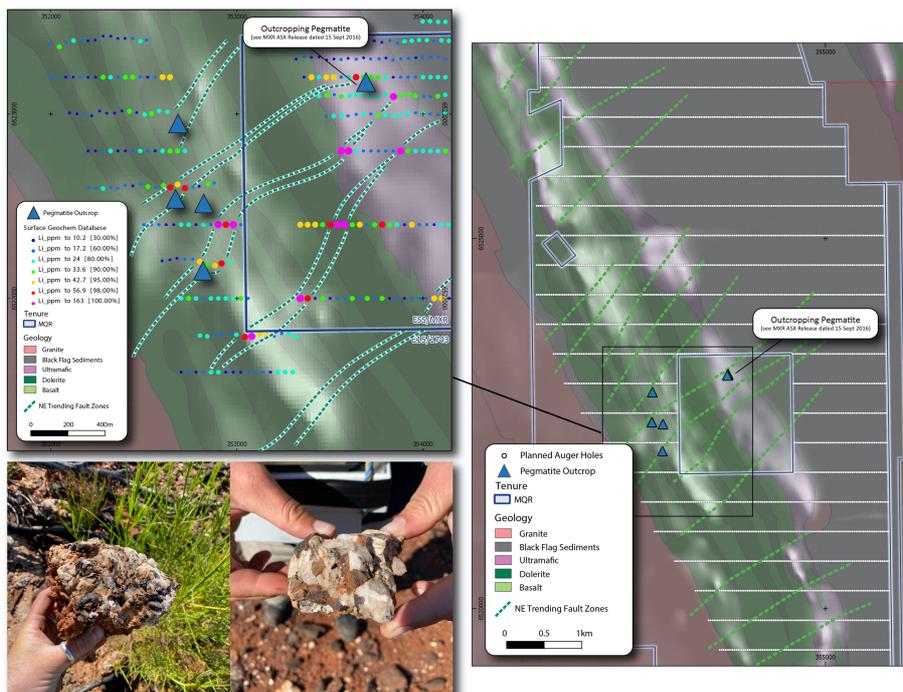


Figure 3 - Planned auger sampling locations, outcropping coarse grained pegmatites and location of mapped pegmatites compared to historical geochemistry data (clockwise from right)

## 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.



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