

NEWS RELEASE
June 1, 2017

Symbol: TSX-V: MMS
For Immediate Dissemination

MACARTHUR MINERALS DISCOVERS NEW LITHIUM PEGMATITE SWARMS AT MARBLE BAR IN THE EAST PILBARA REGION OF WESTERN AUSTRALIA

Macarthur Minerals Limited (TSX-V: MMS) (the “Company” or “Macarthur Minerals”) is pleased to announce it has identified a number of significant lithium bearing, spodumene and lepidolite mineralised pegmatites at its new Marble Bar Lithium Project Joint Venture in the Pilbara region of Western Australia.

David Taplin, President, CEO and Director of Macarthur commented:

“Macarthur Minerals is excited about the extent of pegmatite outcrop discovered at the Marble Bar Lithium Project where lithium mineralisation, including spodumene and lepidolite, was observed in a number of surface rock samples. These new pegmatite discoveries extend the area of known mineralisation to 14 km² and the total strike length to 9.0 km”.

Results of Reconnaissance Sampling Program

Following a two-week reconnaissance mapping program, covering the Marble Bar Lithium Project’s tenements E45/4724 and E45/4669 (Figure 2), a number of samples from pegmatitic outcrops displayed significant lithium bearing signatures, as measured by handheld XRF, as well as visual confirmation of spodumene and lepidolite mineralisation. The previously identified pegmatite swarm was extended to the north and south by 6.3 km (Figure 1). Portable XRF results of the potassium-rubidium ratio (K/Rb) showed the pegmatites to be highly fractionated, which is consistent with pegmatites that host lithium bearing minerals.

In addition, the reconnaissance program identified a new area covering 1.5 km in length where the K/Rb ratio indicates highly fractionated pegmatites (Figure 1). Further sampling is warranted across this area.

Sampling of previously mapped pegmatites confirmed lithium mineralisation with abundant spodumene and lepidolite observed. Measurement by portable XRF showed the pegmatites to be highly fractionated with 24 of 31 rock samples collected displaying K/Rb ratios less than 10 as well as highly anomalous values of indicator elements, rubidium and niobium.

A total of 187 rock and 112 soil samples have been dispatched to the laboratory for analysis and results will be reported as they become available.

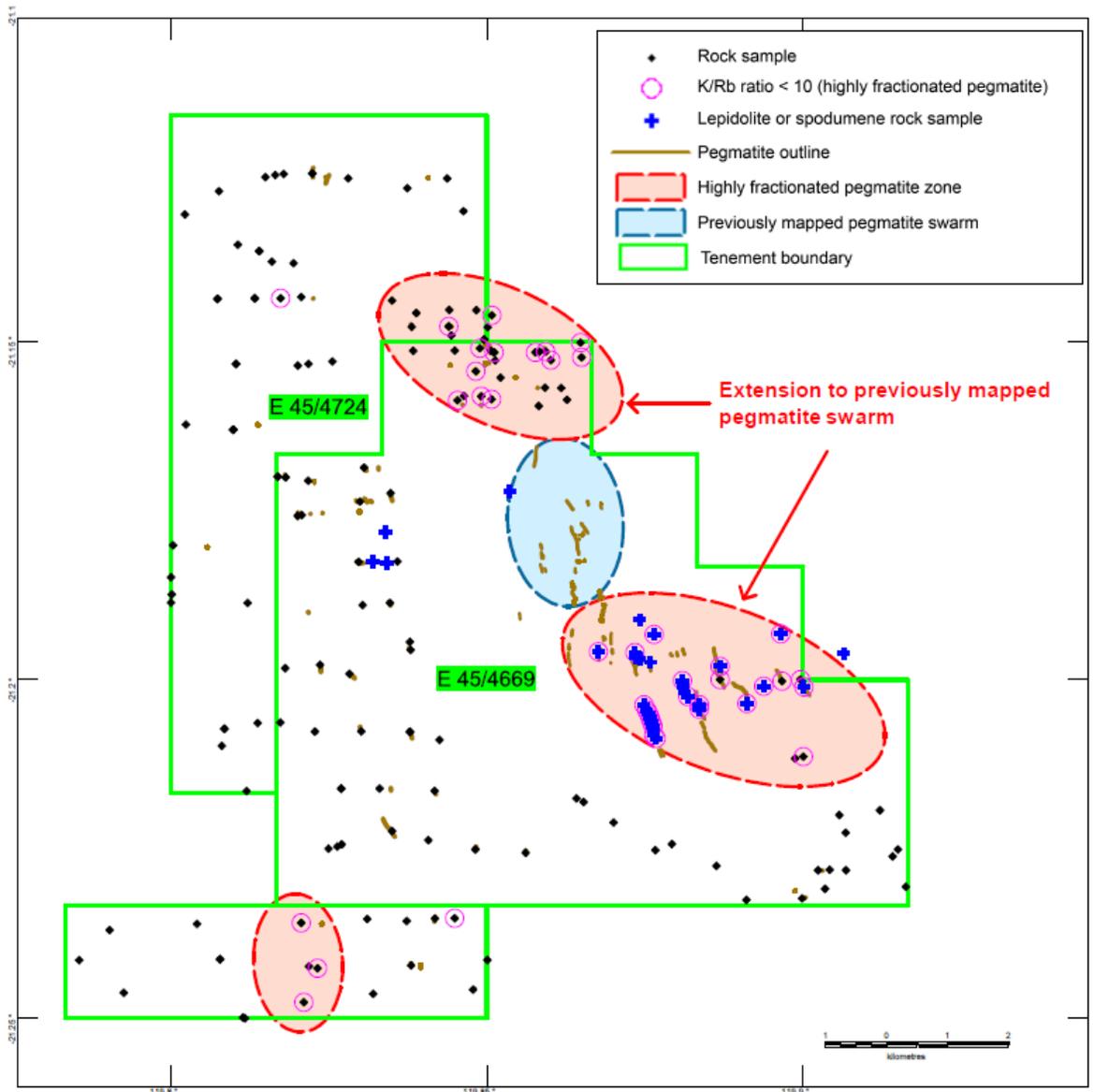


Figure 1: Area of newly discovered mineralised pegmatites.

Marble Bar Lithium Project

The Marble Bar Lithium Project consists of four granted Exploration Licences (E45/4669, E45/4690, E45/4724 and E45/4746) covering 368 km² located between 10 and 50 km east of Marble Bar in the East Pilbara region of Western Australia.

Marble Bar is located 200 km south east of Port Hedland and approximately 100 km east of the emerging world class Pilgangoora and Wodgina lithium province.

The Marble Bar Lithium Project contains the first reported significant spodumene discovery in the East Pilbara outside of the Pilgangoora-Wodgina area. It is the first discovery of spodumene-rich pegmatites within a granitic host rock. This discovery has opened up for exploration, the entire Marble Bar Lithium Project area within the granites of the Mt Edgar batholith and importantly, also within the nearby greenstones.

On 2 May 2017, Macarthur Minerals entered into a Memorandum of Understanding to jointly acquire 100% of both the Marble Bar Lithium Project and Pippingarra Lithium Project in Western Australia through a 50/50 joint venture with Southern Hemisphere Mining Limited (ASX:SUH) (“SUH”) from Great Sandy Pty Ltd (‘Great Sandy’), a private Australian company controlled by Denis O’Meara¹.

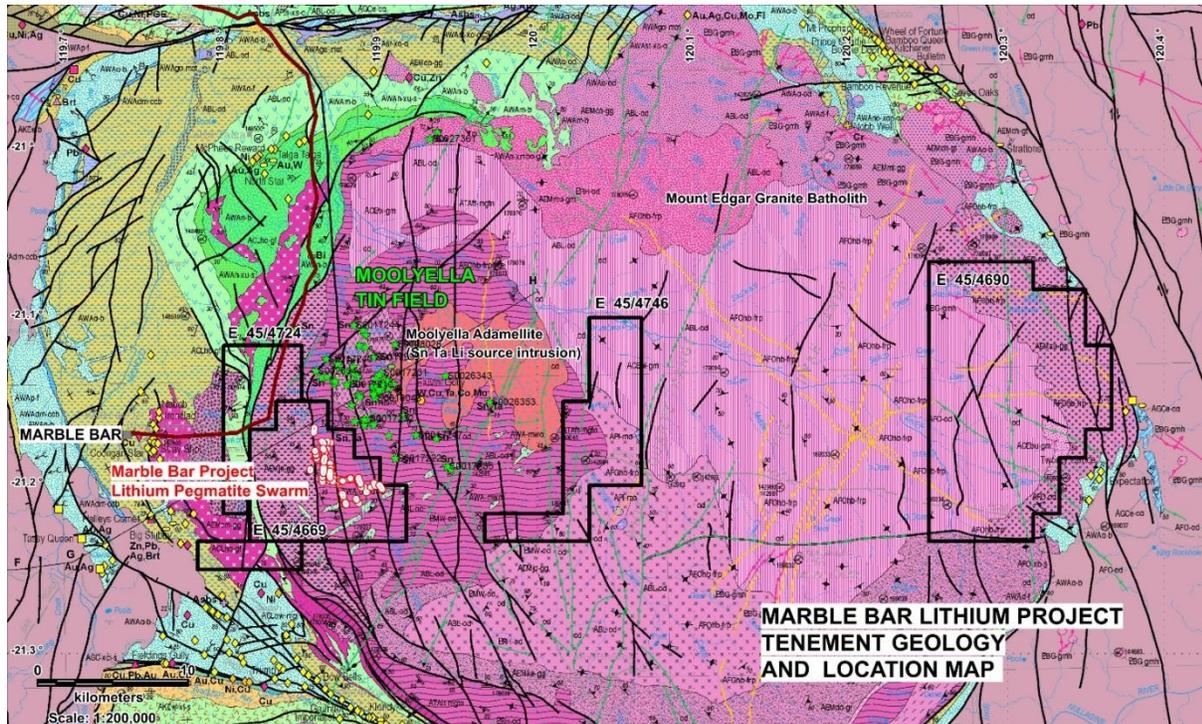


Figure 2: Marble Bar Lithium Project tenement geology and location map.

QUALIFIED PERSON

Mr Brian Richardson, a Member of The Australasian Institute of Mining and Metallurgy is a Qualified Person as defined in National Instrument 43-101. Mr Richardson has reviewed and approved the technical information contained in this news release. Mr Richardson is a consulting geologist to Great Sandy, the owner and potential vendor of E45/4669. Mr Richardson is a financial beneficiary if Great Sandy sells the tenement to the Macarthur Minerals and SUH Joint Venture.

ABOUT MACARTHUR MINERALS LIMITED (TSX-V: MMS)

Macarthur Minerals Limited is an exploration and development company that is focused on developing its lithium exploration interests in Australia and Nevada. Macarthur Minerals is the majority shareholder of Macarthur Australia Limited, which is intended to be listed on the ASX, which owns significant iron ore and lithium projects in Western Australia.

ABOUT SOUTHERN HEMISPHERE MINING

Southern Hemisphere Mining Limited (ASX Code “SUH”) is an experienced copper-gold explorer and developer in Chile, South America, the world’s leading copper producing country and one of the most prospective regions of the world for major new copper discoveries. The Company’s focus is on the Llahuin Porphyry Copper-Gold Project where the company has drilled up a significant Copper Gold resource and the Los Pumas Manganese Project.

¹ Refer to News Release dated 2 May 2017.

On behalf of the Board of Directors,
MACARTHUR MINERALS LIMITED

"Cameron McCall"
Cameron McCall, Chairman

Company Contact:
David Taplin, President, CEO
and Director
dtaplin@macarthurminerals.com
Tel: +61 407470044
www.macarthurminerals.com

**THIS NEWS RELEASE IS NOT FOR DISTRIBUTION TO UNITED STATES SERVICES OR
FOR DISSEMINATION IN THE UNITED STATES**

NEITHER TSX VENTURE EXCHANGE NOR ITS REGULATION SERVICES PROVIDER (AS THAT TERM IS DEFINED IN THE POLICIES OF THE TSX VENTURE EXCHANGE) ACCEPTS RESPONSIBILITY FOR THE ADEQUACY OR ACCURACY OF THIS RELEASE.

Caution Regarding Forward Looking Statements

Certain of the statements made and information contained in this press release may constitute forward-looking information and forward-looking statements (collectively, "forward-looking statements") within the meaning of applicable securities laws. The forward-looking statements in this press release reflect the current expectations, assumptions or beliefs of the Company based upon information currently available to the Company. With respect to forward-looking statements contained in this press release, assumptions have been made regarding, among other things, the timely receipt of required approvals, the reliability of information, including historical mineral resource or mineral reserve estimates, prepared and/or published by third parties that are referenced in this press release or was otherwise relied upon by the Company in preparing this press release. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and no assurance can be given that these expectations will prove to be correct as actual results or developments may differ materially from those projected in the forward-looking statements. Factors that could cause actual results to differ materially from those in forward-looking statements include fluctuations in exchange rates and certain commodity prices, uncertainties related to mineral title in the project, unforeseen technology changes that results in a reduction in iron ore demand or substitution by other metals or materials, the discovery of new large low cost deposits of iron ore, uncertainty in successfully returning the project into full operation, and the general level of global economic activity. Readers are cautioned not to place undue reliance on forward-looking statements due to the inherent uncertainty thereof. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. The forward-looking statements contained in this press release are made as of the date of this press release and except as may otherwise be required pursuant to applicable laws, the Company does not assume any obligation to update or revise these forward-looking statements, whether as a result of new information, future events or otherwise.