

**NEWS RELEASE**  
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**Symbol: TSX-V: MMS**  
For Immediate Dissemination

## **MACARTHUR MINERALS STAKES FURTHER ACREAGE IN THE PILBARA FOR HARD ROCK LITHIUM**

**Macarthur Minerals Limited (TSX-V: MMS)** (the “Company” or “Macarthur Minerals”) is pleased to announce that it has applied for an additional exploration licence E45/4824, in the Pilbara region of Western Australia, adjacent to its existing exploration licences E45/4708 and E45/4709, to extend the contiguous area to 367 square kilometres (90,687 acres). The Company now has total tenement acreage under application in the Pilbara region of 1,449 square kilometres (358,055 acres), in addition to its Yalgoo, Edah Hill, Ravensthorpe, Sulphur Springs, Whim Creek interests in Western Australia and Nevada Stonewall interests in the United States of America.

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

*“The Company has applied for further acreage in the Pilbara to extend exploration licence applications E45/4708 and E45/4709, with new exploration licence application E45/4824, into a contiguous area bringing the total tenement acreage under application in the Pilbara region of 1,449 square kilometres in addition to its Yalgoo, Edah Hill, Ravensthorpe, Sulphur Springs, Whim Creek and Nevada Stonewall interests. The majority of the tenement acreage under application is due to be granted by November or December, which will allow the Company to commence initial lithium exploration.”*

### New Pilbara Tenement

The location of the new Pilbara exploration licence application (E45/4824), which covers an area of 211 square kilometres is shown in Figure 1.

The Pilbara applications cover similar geological settings to the Pilgangoora Li-Ta pegmatite deposits, which host the lithium projects of Australian Securities Exchange listed companies, Pilbara Minerals Limited (ASX: PLS) and Altura Mining Limited (ASX: AJM).

### Geological Setting of the Tenement Applications

Macarthur’s applications in the Pilbara are selected on the basis of geological attributes that are broadly consistent with the currently accepted exploration/mineral system model for Lithium-Caesium-Tantalum (“LCT” type) rare element pegmatites. The tenement applications cover areas of potential LCT pegmatite host rocks such as greenstone belts (meta-volcanic sequences), earlier granitoids and gneisses. The tenement applications are located within 5–10 km of ~2.89 to 2.83 Ga<sup>1</sup> post-tectonic monzogranite (S-type) intrusions, which are considered to be the source of magmatic melts from which the LCT pegmatites evolved. The fertile character of the highly fractionated younger monzogranites<sup>2</sup>, and their potential link to lithium mineralisation, adjacent to and within the new application is supported by numerous associated occurrences of lithium (Li), tantalum (Ta), tin (Sn), and beryllium (Be).

### Acreage Package

The Company now holds 21 Exploration Licence Applications and prospective interest in rights to lithium covering a total area of 2,029 square kilometres (501,376 acres) in the Pilbara, Ravensthorpe and the Yalgoo/Edah regions of Western Australia. In addition, the Company has also entered into an agreement

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<sup>1</sup> Ga is giga anna – 1 Billion years.

<sup>2</sup>S-type monzogranites are biotite-bearing granitoids considered to have formed by crystallisation of melts from metasedimentary protoliths.

to acquire the Stonewall Project in Nevada, which covers an area of approximately 5,700 acres (23 km<sup>2</sup>).

Macarthur is currently evaluating its acreage and commencing discussions with various third parties concerning potential joint ventures to maximise the exploration effort throughout 2016.

### **ABOUT MACARTHUR MINERALS LIMITED (TSX-V: MMS)**

Macarthur Minerals Limited is an exploration and development company that is focused on identifying and developing high grade lithium and counter cyclical investments, with significant lithium exploration interest in Australia and Nevada. In addition, Macarthur retains its two iron ore projects in Western Australia; the Ularring hematite project (Indicated 54.46 million tonnes @ 47.2% Fe, Inferred 25.99 million tonnes @ 45.4% Fe - Pre-Feasibility Study)<sup>3</sup> and the Moonshine magnetite project (1.3 billion tonnes @ 30.1% Fe - Preliminary Economic Assessment)<sup>4</sup>.

On behalf of the Board of Directors,  
**MACARTHUR MINERALS LIMITED**

*"Cameron McCall"*  
Cameron McCall, Chairman

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<sup>3</sup> Previously announced on August 16, 2012 NI 43-101 Technical Report filed October 1, 2012, titled "NI 43-101 Technical Report, Macarthur Minerals Limited, Pre-Feasibility Study, Ularring Hematite Project, Western Australia".

<sup>4</sup> NI43-101 Technical Report filed December 17, 2009, titled "NI43-101 Technical Report on Lake Giles Iron Ore Project: Western Australia" and was updated by Snowden Mining Industry Consultants (NI43-101 Technical Report filed March 25, 2011, titled "Macarthur Minerals Limited: Moonshine and Moonshine North Prospects, Lake Giles Iron Project, Western Australia, NI43-101 Technical Report – Preliminary Assessment".

Figure 1 – Macarthur’s new and existing lithium acreage in the Pilbara region of Western Australia.

