

**NEWS RELEASE**  
July 31, 2019

**Symbols: TSX-V: MMS, OTCQB: MMSDF**  
For Immediate Dissemination

## **MACARTHUR MINERALS SECOND QUARTER 2019 UPDATE**

**Macarthur Minerals Limited (TSX-V: MMS)** (the “Company” or “Macarthur”) is pleased to provide an update to Shareholders outlining an active and significant second quarter 2019 in the ongoing development of the Company’s Lake Giles Iron Ore Projects and exploration activities across the lithium, gold, nickel and cobalt projects in Western Australia and Nevada, USA.

### **SECOND QUARTER HIGHLIGHTS**

- ❖ Closing US\$6 million institutional Convertible Note offer to fund a Bankable Feasibility Study (“BFS”) on the Lake Giles Iron Project
- ❖ Glencore participation in the financing to fund the BFS
- ❖ Appointment of Orbit Drilling Pty Ltd to complete the infill and metallurgical drilling program to support the BFS
- ❖ Filing of the Preliminary Economic Assessment NI43-101 Technical Report, for a combined hematite and magnetite project (the Lakes Giles Iron Project). This re-evaluation resulted in:
  - a reduction in the operational costs for the hematite product;
  - rationalisation and reduction in Capital Cost for development of a combined magnetite and hematite project; and
  - revised logistics transport solutions and costs
- ❖ Progress of a rail haulage agreement by entering into an Exclusive Negotiation Agreement with Aurizon.
- ❖ Repositioning of Macarthur’s portfolio of highly prospective lithium and gold projects in the Pilbara region of Western Australia through an earn-in Joint Venture Agreement with Australian listed exploration company Fe Limited (ASX: FEL)

Mr Cameron McCall, Executive Chairman of Macarthur Minerals commented:

*“The uptick in the iron ore price to US\$122.60/tonne continues to drive major momentum in the iron ore industry. Premiums for high grade ore and discounting of lower grade ore have contracted during 2019 but remain well above 2018 spot prices.*

*The Company’s focus on delivering a product of +65% Fe will create price support when the iron ore industry returns to an oversupply market environment and continues to engage with potential strategic partners to create short-term cash flow and deliver the Lake Giles Iron Project through to production.*

*The Company assessed the recoverable value of the projects to be in excess of historical capitalised costs. The impairment change of \$55,851,937 raised in 2016 has been reversed as reported in its audited annual report for year ended March 31, 2019 filed in July 29, 2019. The Iron Ore projects’ book value reflects the historical costs of exploration and evaluation expenditure capitalised in accordance with the Company’s accounting policy and Australian accounting standards and IFRS.*

## IRON ORE

In the second quarter, the key project advancements have been the completion of the following:

- Filing of the Lake Giles PEA Technical Report
- Signing of a 10-year offtake agreement with Glencore
- Progress towards a rail haulage contract with Aurizon
- Infill drill planning to support a Bankable Feasibility Study
- Reversal of the impairment change of \$55,851,937

The Lake Giles PEA rationalised the Ularring Hematite and Moonshine Projects into a combined project resulting in substantial cost savings and efficiencies. The key highlights<sup>1</sup> are summarised below:

- Project after tax, real Net Present Value (“NPV”) of US\$375 million (A\$535 million) at an 8% discount rate, based on a discount cash flow model with:
  - A project life of 31 years and saleable product of 2.5 to 3.4 million tonnes per annum.
  - Total sales of 83 million tonnes.
- Average operating cost of US\$37.62 including US\$31.30/tonne Free on Board (“FOB”) for hematite and US\$37.43/tonne FOB for magnetite.
- Total Capital Cost estimated at US\$326 million including contingency of US\$44 million, rehabilitation costs of US\$38 million and sustaining capital expenses over life of mine of US\$54 million.
- The Project is potentially highly profitable with a discounted payback, based on NPV, of three years.

With the closure of the financing, the Company is now focused on completing the BFS to support debt funding for project construction.

## NON-IRON ASSETS

This year, Macarthur’s focus has been on the West Australian Iron Ore assets. To support this strategy, the Company ventured out the gold and lithium tenements in the Pilbara region to ASX listed Australian explorer, Fe Limited (“FEL”). FEL has the ability to earn up to 75% of these Projects through exploration and staged cash payments to Macarthur. During the quarter FEL commenced exploration on the areas and will undertake substantial geochemistry and ground mapping across this portfolio of projects during the next quarter.

This joint venture arrangement allows the Company to focus solely on the Lake Giles Iron Ore portfolio which is the Company’s flagship project.

### About Fe Limited

Fe Limited (ASX: FEL) is a listed mineral exploration Company that holds or has rights or interests in various projects and tenements prospective for battery metals, copper, iron ore, gold and base metals located in Australia. The Company is focused on the exploration of battery metal projects. In March 2019, FEL entered into an agreement to acquire the Pippingarra Lithium Project and the Marble Bar Lithium Project (Project) from Mercury Resources Group Pty Ltd. These areas complement the tenement portfolio of Macarthur Minerals, establishing a 1800 square kilometre exploration footprint in the important Lithium and Gold region of Western Australia.

## PILBARA GOLD PROJECTS

Macarthur holds a large parcel of Pilbara acreage consisting of the Hillside, Panorama and Bonnie Scot tenements, all with significant gold potential.

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<sup>1</sup> Press Release filed June 17, 2019, titled “Macarthur Files Technical Report for Lake Giles Iron Ore Project”

The Panorama and Bonnie Scot tenements cover an extensive area of the Mt Roe Basalts and Hardey Formation that have demonstrated potential for hosting conglomerate gold. The recent soil sampling program has now identified prospective target follow-up exploration areas.

A SkyTEM geophysical survey was conducted over the Hillside tenements to identify key areas that could be the source of the high-grade gold and copper samples taken during the soil sampling program. This type of survey assists in the identification of deep conductors such as clusters of massive sulphide-hosted base metal deposits. This program identified 18 priority geophysical targets that concentrate to known mineralisation.

### **PILBARA HARD ROCK LITHIUM**

Macarthur's Pilbara lithium portfolio covers an area of ~1,281 square kilometers, have regulatory exploration licence approval and cover similar geological settings to that of "world class" Pilbara lithium deposits and producing spodumene mines. These areas are included in the earn-in Joint Venture program that is targeting battery metal deposits. These areas have been added to during 2019 with the lithium potential tenements held by Fe Limited.

### **NEVADA, USA REYNOLDS SPRINGS PROJECT**

Macarthur holds 210 unpatented mining claims at its Reynolds Springs Lithium Brine Project in the Railroad Valley, Nevada, USA. Analysis of geochemical soil sampling found up to 405ppm Li.

Macarthur conducted further review of several historic well logs drilled on the claims and identified numerous conductive, faulted zones that indicate the presence of a brine aquifer.

### **NEXT STEPS**

Macarthur will actively advance, with our key partners, its iron ore assets in Western Australia. Preparation and planning are well underway for the infill drilling of the Moonshine magnetite deposit and a Bankable Feasibility Study of the Lake Giles Iron Project. Further, the Company will work closely with Fe Limited to advance exploration of its high-quality lithium, gold and base metal tenements in the Pilbara region.

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

Macarthur is an iron ore development, gold and lithium exploration company that is focused on bringing to production its Western Australia iron ore projects. The Lake Giles Iron Ore Project includes the 80 million tonne Ularring hematite resource (approved for development) and the 710 million tonne Moonshine magnetite resource. Macarthur has prominent (~1,281 square kilometer tenement area) gold, lithium and nickel exploration interests in Pilbara region of Western Australia. In addition, Macarthur has lithium brine Claims in the emerging Railroad Valley region in Nevada, USA.

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

*"Cameron McCall"*  
Cameron McCall, Executive Chairman

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