

8 December 2020

Market Update Macarthur Minerals in "Pole Position" to become a serious Iron Ore Player in the Yilgarn

Macarthur Minerals Limited (TSX-V: MMS) (ASX: MIO) (OTCQB: MMSDF) (the "Company" or "Macarthur") is pleased to provide shareholders with an update on key areas of progress that have been made during the 2020 calendar year, and an outline of its planned activities and focus for 2021.

Feasibility Study

Work on the Feasibility Study for the Lake Giles Iron Project ("Project") continues to be advanced. During 2020, your Company has placed specific focus on:

- defining a Measured Resource for the Project (including the completion and filing of the required supporting technical report); and
- advancing resolution of the key transport infrastructure solutions necessary to successfully deliver our highgrade magnetite product to market.

The many and complex elements of the Feasibility Study are being addressed with appropriate rigour to ensure that the Project can be optimised. The Company continues to target conclusion of the Feasibility Study next year and is working with its financial advisers (EAS Advisors in New York) to align the conclusion of the study with the delivery of a diligently structured capital funding solution aimed at preserving value and minimising dilutionary impacts for shareholders.

Route to market potential remains unaffected by the realities of broader regional iron ore production

The Company's Board and Management remain confident that, (following completion of a successful Feasibility Study for the Lake Giles Iron Project), the potential for the Project to commence commercial mining operations by the current target of Q1 2024 remains unaltered by broader regional iron ore production utilising the existing rail and port network.

The reasons for this include the following:

• The Kalgoorlie to Esperance rail network continues to remain under-utilised when compared with historic run rates during the periods leading up to mid-2018.

With a run rate of just over 7 million tonnes of iron ore shipped along the Kalgoorlie to Esperance rail network during the 2020 financial year, and run rate marginally above 8 million tonnes during the last four quarters to 30 September 2020, the rail network remains materially under-utilised when compared with the rates being achieved up to mid-2018 prior to Cliffs Natural Resources leaving the Australian market.



The Company's Board and Management consider that there is adequate potential capacity to handle Macarthur's initial 3.3mtpa of iron ore products from Lake Giles, and this has been supported by the recent Proposal that the Company received from Arc Infrastructure ("Arc") for below rail capacity (see 15 July 2020 ASX announcement here). The Arc Proposal provides indicative track access pricing and a clear pathway to a full Commercial Track Access Agreement which can support Macarthur's Feasibility Study.

• Iron ore exports through the Port of Esperance during the 2020 financial year totalled 7,378,420 tonnes (Source: Southern Ports Authority Annual Report 2020). At this level, capacity on the Berth 3 iron ore ship loader remains materially underutilised when compared with the level of iron ore exports that occurred prior to the region's major producer, Cliffs Natural Resources, leaving the Australian market in mid-2018. The Company remains confident of achieving a solution that can capitalise on the potential for available capacity through the Port of Esperance to complete its route to market. Management is working diligently with the Southern Ports Authority to examine options for rail unloading, product storage and ship-loading solutions to support all required production tonnages, and with the intention of achieving a contracted pathway for critical infrastructure access at the Port of Esperance in the short term.

2021 Objectives

Following closing of the recent A\$6.25 million private placement, and the separate 'at call' A\$20 million controlled placement facility, the Company is well funded to target delivery of a number of other material objectives during the next 12 months. In addition to completing the Feasibility Study, securing a strategic partner and concluding our route to market for the Lake Giles Iron Project, 2021 will see the Company focusing on a series of complementary objectives. These include:

- To commence commercial production of the hematite resource at Ularring and facilitate an associated export solution for that resource;
- To formalise strategic partnerships for the key infrastructure needed to commercialise the Lake Giles Iron Project; and
- To reposition the Company's 100% owned, 720 km2 of Lithium, Gold, Copper and base metal tenements in the Pilbara region of Australia and its Lithium claims in the Nevada region of the USA so that their value can be unlocked for the benefit of shareholders.

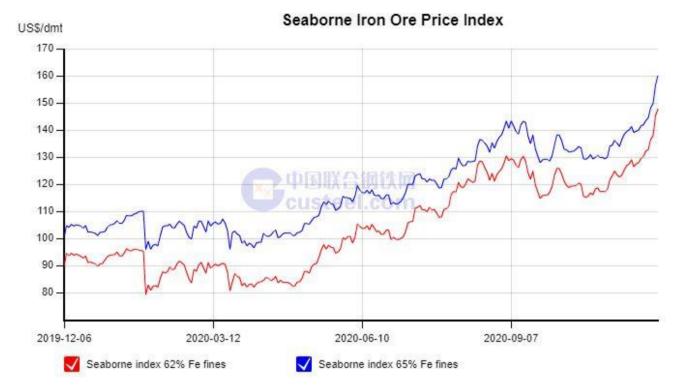
Management remains primarily focused on delivering the Lake Giles Iron Project and each of the above objectives aligns directly with that purpose, while creating potential to grow further value for shareholders in the short term. Details on the Company's imminent plans to advance early hematite production at Ularring will be provided to the market in the coming weeks and months.

Iron Ore Market

From a market perspective, the iron price has remained very robust during 2020, driven by high steel production and demand in China, and margins for high-grade, low impurity magnetite concentrate are forecast to continue given the commitment of many global economies to clean air, zero emissions targets by 2050/2060. This has the potential to drive long-term demand for magnetite concentrate and for the cleaner fuel inputs to electric arc furnace technology that can help to achieve a zero emissions global steel industry.



Iron ore prices have continued to remain robust and the margin for high grade +65%Fe fines continues to trend well.



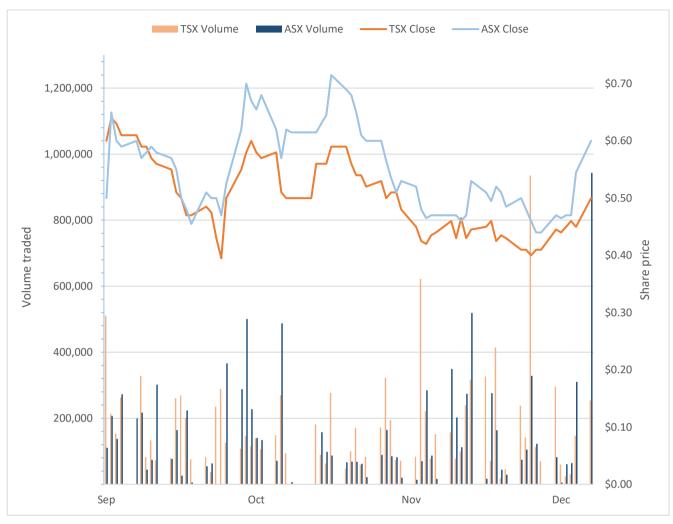
Source: custeel.com

Share Price

Although the market has fluctuated over the last month off the September and October highs, this is arguably attributable to end of year selling in the North American market. No Director or insider has sold down their position during this period.

Over the last month, the Company's securities have traded in Canada ("TSXV") between C\$0.40 and C\$0.50, and on the Australian Stock Exchange ("ASX") between A\$0.44 and A\$0.60. The trading average volumes in this period have been 148,135 on the TSXV and 198,561 on the ASX.





Update on Ancillary Iron Projects

Treppo Iron Project

The Treppo Iron Project comprises one application for an Exploration Licence that is located approximately 30 kilometres West of the Lake Giles Iron Project. Upon grant of this tenement the Company plans to commence exploration including drilling of hematite targets that have been mapped to date. This project is ideally situated in close proximity to the Company's Lake Giles Iron Project and provides long term optionality in utilising regional infrastructure and allows for fast-tracking of development.

Mt Jackson Iron Projects

The Mt Jackson Iron Project comprises Exploration Licence E77/2542 located approximately 35 kilometres Westnorthwest Treppo Iron Project. Tenement E77/2542 is located adjacent to the Deception iron ore deposit that is actively mined by Mineral Resources Ltd ("MRL"). The Company is currently developing a program of field mapping and rock chip sampling to understand the prospectivity for iron ore across these projects.

Extension of Rights Offering Warrants issued in December 2017

In September 2020, the TSX Venture Exchange approved the extension of the expiry date of 7,928,183 post-consolidation common share purchase warrants that were issued as part of the rights offering to shareholders, which was completed by the Company in December 2017.



The expiry date has been extended from 15 December 2020 to 15 December 2021 with the Warrants exercisable for common shares in Macarthur Minerals at a price of C\$0.80 per share.

Issue of Performance Incentives

The Board has resolved that the recent expiry of 588,235 RSUs issued to Joe Phillips and Cameron McCall respectively on 27 November 2017 will be reissued on the following terms:

- 500,000 RSUs to each Joe Phillips and Cameron McCall;
- a vesting term of C\$0.65 for 20 consecutive trading days; and
- expiring three years from the date of grant.

Joe Phillips, Managing Director of Macarthur Minerals commented:

"Macarthur is in pole position to move ahead with its Lake Giles Iron Project. The continued sub-optimal utilisation of regional rail and port infrastructure and Macarthur's enviable portfolio of iron ore resources in the Yilgarn region means that Macarthur continues to have a historic opportunity not only to bring our high grade magnetite project online, but to become a serious player in the Yilgarn region in the foreseeable future."

Andrew Bruton, Chief Executive Officer of Macarthur Minerals commented:

"Management continues to clinically focus on laying all of the necessary building blocks to deliver the Lake Giles Iron Project, and the Company's appetite to independently accelerate early production of DSO at Ularring has the potential to add material benefit for shareholders and to assist the development and funding of our main high grade magnetite project. The Company's Management is determined to accelerate outcomes in the coming months. 2021 is set to be a milestone year for the Company".

On behalf of the Board of Directors, Mr Cameron McCall, Chairman

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Company profile

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 Project mineral resources include the Ularring hematite resource (approved for development) comprising Indicated resources of 54.5 million tonnes at 47.2% Fe and Inferred resources of 26 million tonnes at 45.4% Fe; and the Lake Giles magnetite resource of 53.9 million tonnes (Measured), 218.7 million tonnes (Indicated) and 997 million tonnes (Inferred). Macarthur has prominent (~721 square kilometer tenement area) gold, lithium and copper exploration interests in Pilbara region of Western Australia. In addition, Macarthur has lithium brine Claims in the emerging Railroad Valley region in Nevada, USA.

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Caution Regarding Forward Looking Statements

Certain of the statements made and information contained in this press release may constitute forward-looking information and forwardlooking statements (collectively, "forward-looking statements") within the meaning of applicable securities laws. All statements herein, other than statements of historical fact, that address activities, events or developments that the Company believes, expects or anticipates will or may occur in the future, including but not limited to statements regarding expected completion of the Feasibility Study; conversion of Mineral Resources to Mineral Reserves or the eventual mining of the Project, are forward-looking statements. 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. 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 but are not limited to: unforeseen technology changes that results in a reduction in iron or magnetite demand or substitution by other metals or materials; the discovery of new large low cost deposits of iron magnetite; the general level of global economic activity; failure to complete the FS; inability to demonstrate economic viability of Mineral Resources; and failure to obtain mining approvals. 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.