

News release
For Immediate Dissemination

25 June 2020

Macarthur Minerals lodges applications for haul road and railloading tenure to support potential for early revenue DSO mining at Lake Giles

Macarthur Minerals Limited (TSX-V: MMS) (ASX: MIO) (the "Company" or "Macarthur") announces that on 25 June 2020, it lodged applications with the Department of Mines, Industry, Regulation and Safety ("DMIRS") to develop a 93km haul road from its Lake Giles Iron Project to a proposed rail siding adjacent to the Perth to Kalgoorlie rail line in the Yilgarn region of Western Australia.

Subject to obtaining required approvals and completion of construction, the proposed haul road and rail siding will provide optionality for the transport of iron ore by rail to either Esperance Port or the Port of Kwinana.

This key infrastructure is intended to support the development of Macarthur's flagship Moonshine magnetite deposits at Lake Giles, targeting a +65% Fe beneficiated magnetite concentrate, and opens up the opportunity to exploit Direct Shipping Ore ("DSO") from the Ularring hematite deposits.

In 2012, the Company completed a Pre-Feasibility Study for the mining of iron ore from its Ularring hematite deposits targeting a +60% Fe beneficiated fines sinter product. Given the current robust iron ore market, the Company is currently examining the opportunity to accelerate operations for the mining of DSO (as Stage 1) from its Ularring hematite deposits with the objective of generating early revenue flows. The development of new road and rail siding infrastructure has the potential to facilitate this, in addition to supporting the development of the Company's flagship Moonshine magnetite resource (Stage 2) following completion of a successful Feasibility Study for the Lake Giles Iron Project which is currently being progressed.

The details of the proposed haul road and rail siding locations are set out below:

Haul Road

The proposed haul road is covered by Miscellaneous Licence Application (L16/133) extending over a distance of 93km from the Moonshine Magnetite deposit to the existing Perth to Kalgoorlie rail line that has direct access to the Port of Esperance and the Kwinana Bulk Terminal south of Perth, Western Australia. The proposed route is shown in the map in Figure 1 below.

The Company will now work towards completing environmental surveys of the road alignment to progress environmental permitting.



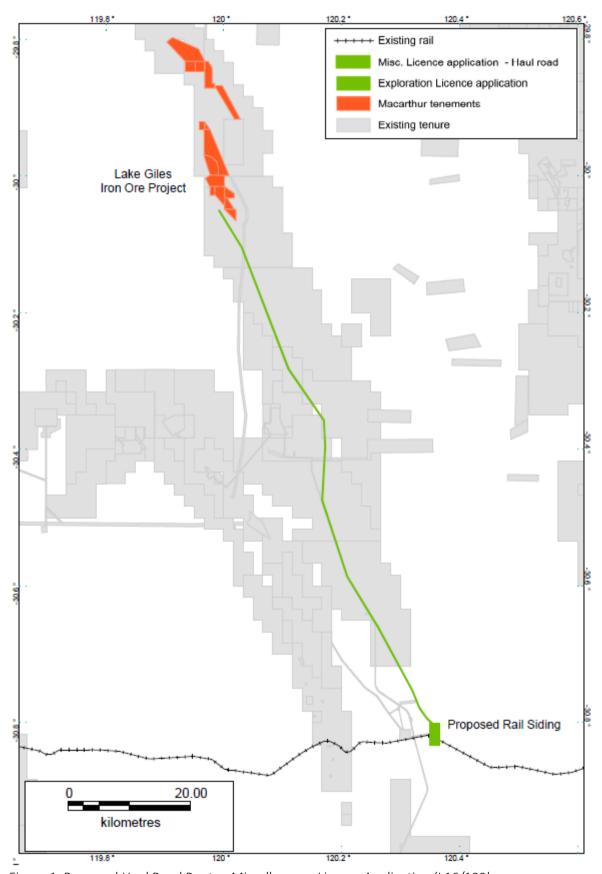


Figure 1: Proposed Haul Road Route - Miscellaneous Licence Application (L16/133)



Rail Siding

The proposed rail siding is covered by Exploration Licence Application (E15/1775) and Miscellaneous Licence Application (L15/409). The loadout offers the flexibility for eastbound rail haulage to the Port of Esperance or westbound haulage to the Kwinana Bulk Terminal south of Perth.

The Company will now progress with a Crown Lease over the area to facilitate the construction of the rail loop from the main rail line and will work with rail service providers to optimise the design of the rail siding infrastructure.

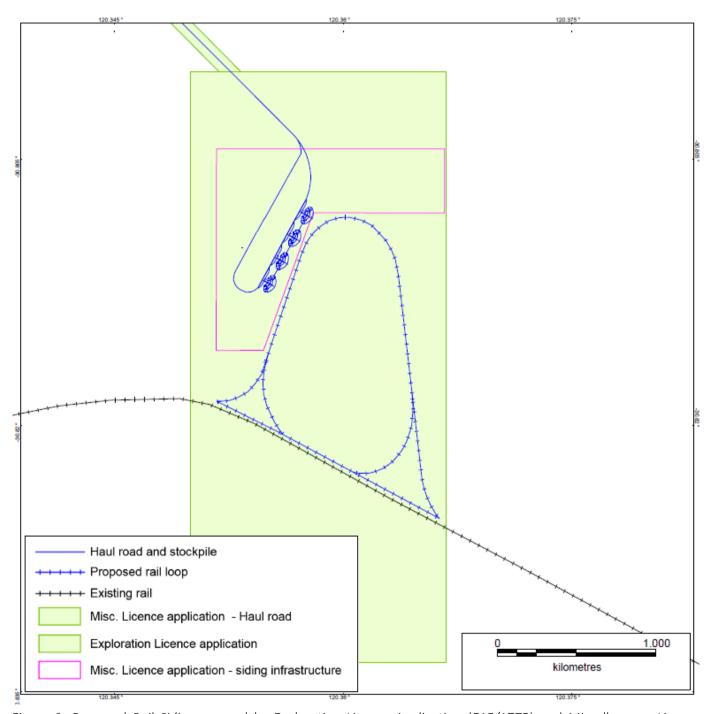


Figure 2: Proposed Rail Siding covered by Exploration Licence Application (E15/1775) and Miscellaneous Licence Application (L15/409)



Cameron McCall, President and Executive Chairman of Macarthur Minerals commented:

"Defining route-to-market infrastructure has been the core focus for the Company throughout 2020. Completion of the Lake Giles Iron Project Feasibility Study will require Macarthur to have engineering designs and tenure for a haul road from the Lake Giles Iron Project to a rail siding with access to the existing rail network. This step signals another positive step forward in the development of the Company's flagship magnetite resource.

The proposed haul road and rail siding also creates the opportunity to support Stage 1 hematite mining operations at Lake Giles ahead of the commencement of Stage 2 commercial magnetite mining operations. The Board considers that advancing early-revenue generating operations would support re-rating of Macarthur as a producer and will complement the announced pathway for the development of its flagship high-grade Moonshine magnetite resource at Lake Giles."

On behalf of the Board of Directors, Mr Cameron McCall, Executive 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 Moonshine magnetite resource of 710 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 forward-looking 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 limited to statements regarding expected completion of the Feasibility Study; granting of mineral tenure to facilitate infrastructrue proposed; 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; failure of the FS to reflect currently anticipated increases annual production and decreases in expected costs at the Project; failure to receive mineral tenure for infratsructure; and failure to obtain mining approvals under the Mining Act. 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.