

20 April 2021

Macarthur Minerals First Quarter Update 2021 Feasibility Study Progressing as Iron Ore Continues to Surge Higher

Macarthur Minerals Limited (TSX-V: MMS) (ASX: MIO) (OTCQB: MMSDF) (the “Company” or “Macarthur”) is pleased to update shareholders on an active first quarter 2021.

2021 Calendar Year Focus

Macarthur’s primary areas of focus during calendar year 2021 include the following:

- **Feasibility Study:** Advancing the Feasibility Study for the Company’s high grade magnetite Lake Giles Iron Project in Western Australia.
- **Repositioning of Pilbara Assets:** Repositioning the Company’s non-iron ore Pilbara tenements to ensure an appropriate exploration and development focus can be maintained for lithium, base metals and gold.
- **Early Hematite Production:** Pursuing an early export opportunity for the Company’s hematite resource at Ularring to take advantage of current high iron ore prices.

2021 First Quarter Highlights

Key highlights during the first quarter of 2021 included announcements on the following:

1. *Feasibility Study Progress*

- Macarthur Minerals Fourth Quarter Update – Iron Ore continues to surge higher – 19 January 2021
- Macarthur signs MOU with Southern Ports Authority for access to Port of Esperance – 8 February 2021
- Lake Giles Feasibility Study Update: Leading consultants appointed to advise owners team – 16 February 2021
- Lake Giles Feasibility Study Update: Macarthur completes AEM Survey of Paleovalleys to identify groundwater targets – 16 March 2021
- Lake Giles Feasibility Study Update: Macarthur bolsters owners’ team with world-class technical appointments – 23 March 2021
- Lake Giles Feasibility Study Update: Macarthur applies for additional tenements to support groundwater drilling campaign – 26 March 2021
- Lake Giles Feasibility Study Update: Macarthur moves ahead with mine design for Lake Giles Iron Project – 15 April 2021

2. *Repositioning of non-iron ore tenements*

- Macarthur enters into Exclusive Agreement over 10 historic Prospecting and Mining Lease Tenements in Leonora Goldfields district of Western Australia – 24 February 2021
- Macarthur Minerals Announces Spin-Out of its Pilbara Gold Copper Tenements to Timeless Capital – 4 March 2021

the green iron ore company

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- Transaction Update: Macarthur terminates LOI with Timeless Capital Corp. following completion of technical assessment & valuation which places higher value on Macarthur's Pilbara Assets – 1 April 2021. (As a consequence, the Company is now exploring an alternative transaction structure which is detailed further below.)

3. *Macarthur grows its Community Connections*

- In March 2021, Macarthur announced that it had joined the Goldfields-Esperance Business Register as a gold partner member. The register provides mapping capabilities and connections to local businesses in the Goldfields-Esperance region and is supported by the Department of Primary Industries and Regional Development, Western Australia. Macarthur's membership of this initiative is a demonstration of its commitment to supporting the local community and the inclusion of local content in the future development of the Lake Giles Iron Project.

2021 Calendar Year Goals

Macarthur is well placed to deliver on its stated 2021 goals. These include:

- **Feasibility Study for Lake Giles Iron Project:** Completion of the Feasibility Study for the Lake Giles Iron Project (including a route to market operating model that will support export through Esperance Port and securing a strategic partner for project development) is a core goal. The Feasibility Study is highly technical and resource intensive, requiring attention to infrastructure design, project approvals, logistics planning, mine planning, metallurgical test work, process flow for magnetite beneficiation and detailed financial modelling. The internal focus on progressing the Feasibility Study forward during this period has been substantial, and the Company has made a series of announcements about strategic appointments and activities that are critical in ensuring its delivery in the shortest possible timeframe. The Company will continue to release regular updates on the Feasibility Study to ensure the market is kept fully informed on the study's progress.
- **Repositioning of Non-Iron Ore Pilbara Assets:** On 24 February 2021, Macarthur announced a repositioning the Company's 100% owned, 720km² gold, copper, zinc, manganese and lithium exploration tenements in the Pilbara region of Western Australia under a three-way deal with Zanil Pty Ltd and Timeless Capital Corp. Following the announcement of that transaction, the Company completed the technical and valuation work on Macarthur's Pilbara tenements and on a package of gold tenements in the Leonora region of Western Australia (which are currently under option by the Company with Zanil Pty Ltd). An independent valuation of those assets placed a materially higher value on Macarthur's Pilbara tenements than was reflected in that deal and the Company announced a termination of the Letter of Intent in early April 2021. As a consequence of the original transaction not proceeding, the Company is currently examining options to unlock the value of the Company's Pilbara assets via a separate listing on the ASX. The Company anticipates that a spin-out of the Pilbara tenements through an ASX listing has the potential to deliver a superior outcome for Macarthur and its shareholders.
- **Early Hematite Production:** The Company is seeking to advance an early production opportunity for the hematite resource at Lake Giles in light of current strong demand and pricing for iron ore. An early export opportunity for the hematite can only be advanced when an export solution can be contracted, and the Company is actively working towards developing the lowest cost, end to end transport logistics solution that will sustain operations. To achieve an accelerated export opportunity, the Company will leverage previous studies undertaken on the Ularring hematite resource that outlined an opportunity for direct shipping iron ore. The Company intends to make an announcement on further progress with this strategy soon.



In addition, the Company will also focus on a series of complementary goals. These will include:

- **Strategic Partnerships:** Formalising strategic partnerships for the key development and infrastructure requirements needed to commercialise the Lake Giles Iron Project.
- **Project Financing:** Advancing terms for financing of the development of the Company's high grade magnetite resources at Lake Giles to ensure a smooth pathway to the prompt closing of finance post-delivery of a successful Feasibility Study.
- **Nevada Lithium Assets:** Formalising a strategic partnership that can advance a programme of works to realise an improved value proposition for the Company's 100% owned lithium brine claims in the Nevada region of the USA. Macarthur holds 210 lithium brine mining claims in Nevada, covering an area of 7 square miles (18 km²) located in Railroad Valley, in Nye County, Nevada, USA. The claims are located approximately 180 miles (300 km) North of Las Vegas, Nevada, and 330 miles (531 km) South East of Tesla's new Gigafactory.
- **Graduation on to main board of TSX:** The company intends to progress its plans to migrate from the TSX-V onto the main board of the TSX during the course of the year.

All of these stated goals have the potential to unlock unrealised value in the Company for the benefit of shareholders.

Iron Ore Market Overview

Current iron ore demand is all about China, and recent UBS economics forecast has China's GDP growth rate at 8.2% in 2021. UBS economics comments also pointed to this GDP growth being driven by domestic and export-focused production, with exports of finished products estimated to grow at 11-12% over the 2021 year.

Further, the steel industry is observing the collision of market growth and de-carbonisation for steel producers. If global CO₂ emissions targets are to be met by 2050, then new capital investment in steel production must consider cleaner processes and ultimately transition away from traditional Blast Furnace process utilising coal as the reductant, towards scrap steel and DRI feed with hydrogen as the reductant.

On the commodity supply side, iron ore producer's capacity investment decisions are tempered with the memory of, and looks back to, the "hot 2008" market. At that time, high prices drove substantial capacity investment, only to be met with a sustained market demand slowdown where iron prices reached a low of USD38/Mt. Unlike the pricing for +62% Fe seen in 2008 and during the first 9 months of 2011, current prices do not appear to be tempered by the higher freight rates for cape size vessels that were seen during the 2008 – 2009 period.

Iron Ore Pricing Overview

Iron ore pricing is variable and traditionally the Chinese New Year holidays coincide with annual steel mill shutdown and lower demand for iron ore, but a December 2020 Platts Iron history is now reporting the iron ore pricing has been sustained in Q1, 2021. In fact, Traded Economics (13 April 2021) reported that iron ore benchmark 62%Fe increased USD15.20/Mt or 9.75% since the beginning of 2021. The World Steel Association, forecast annual steel output to grow 4.1% in 2021. This growth is being driven by three factors:

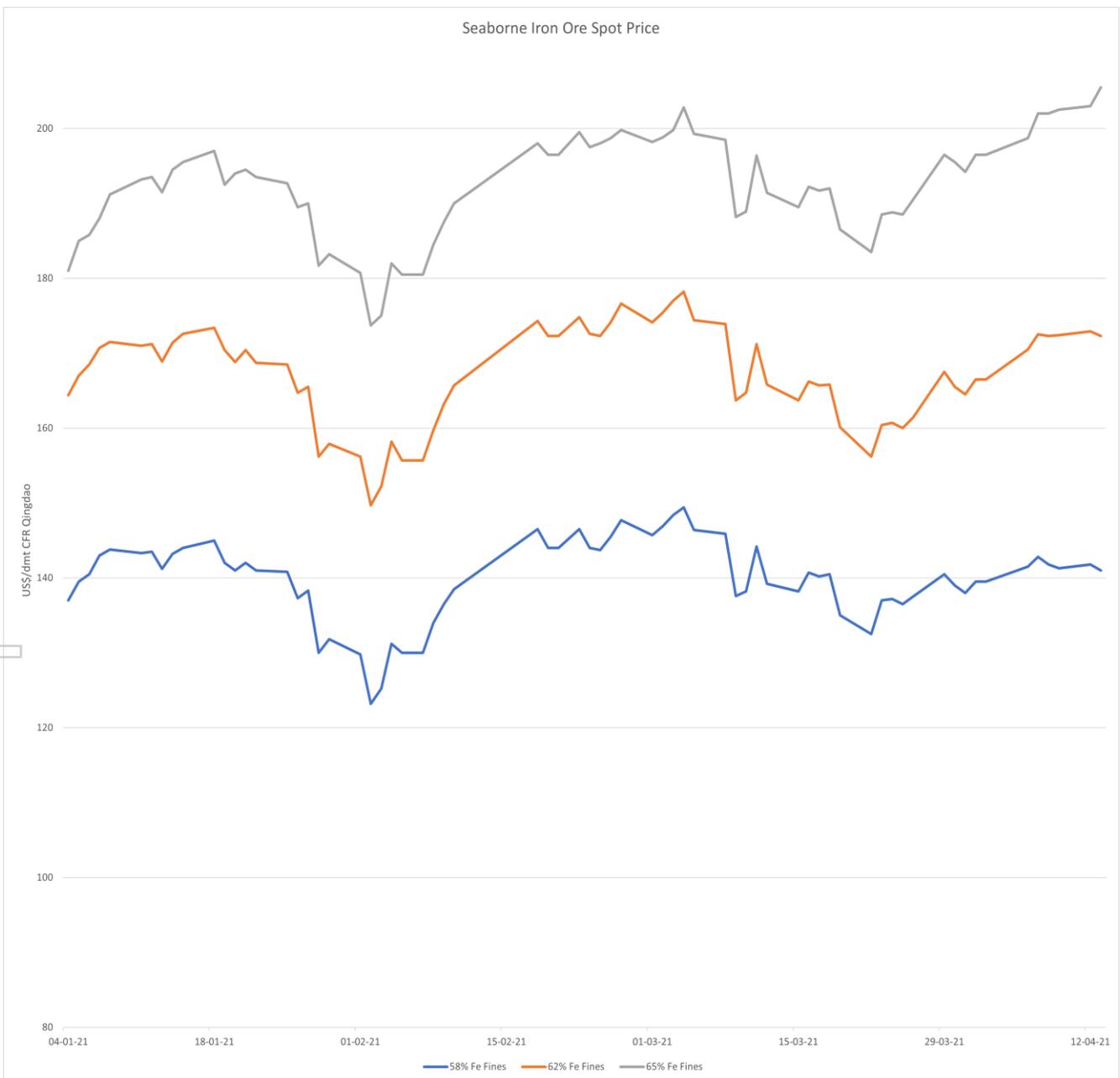
1. Pent up COVID-19 demand;
2. Increased Chinese steel production; and
3. Steel infrastructure inputs into National Governments' stimulus programs.



As at 19 April 2021, the +62%Fe spot price (CFR level) was US\$177.70/dmt and +65%Fe spot price (CFR level) was US\$211.50/dmt (source: *custeel.com*). Global iron ore prices have remained strong over the course of Q1 2021 with +62%Fe regularly trading above USD172/dmt (CFR level) and the premium for +65%Fe remaining consistently high. Prices for +62%Fe have certainly been relatively stable, above USD150/dmt (CFR level) throughout the last 12 months, and although Chinese steel outputs have recently come off, some analysts have noted that there has been a surge for high grade spot supply as steel margins surge. This may be buying some time before displacement of marginal supply kicks in, amplified by decarbonisation, as steel output trends lower and supply gets seasonally stronger.

The drive towards low carbon steelmaking is expected to increase demand for pellet feed, building a strong case for China to build direct reduced iron (DRI) hubs over the coming years, based on high grade, low impurity iron ore pellets. That's a perfect scenario for the development of the story for Macarthur's high grade magnetite concentrate.

Source: *custeel.com*

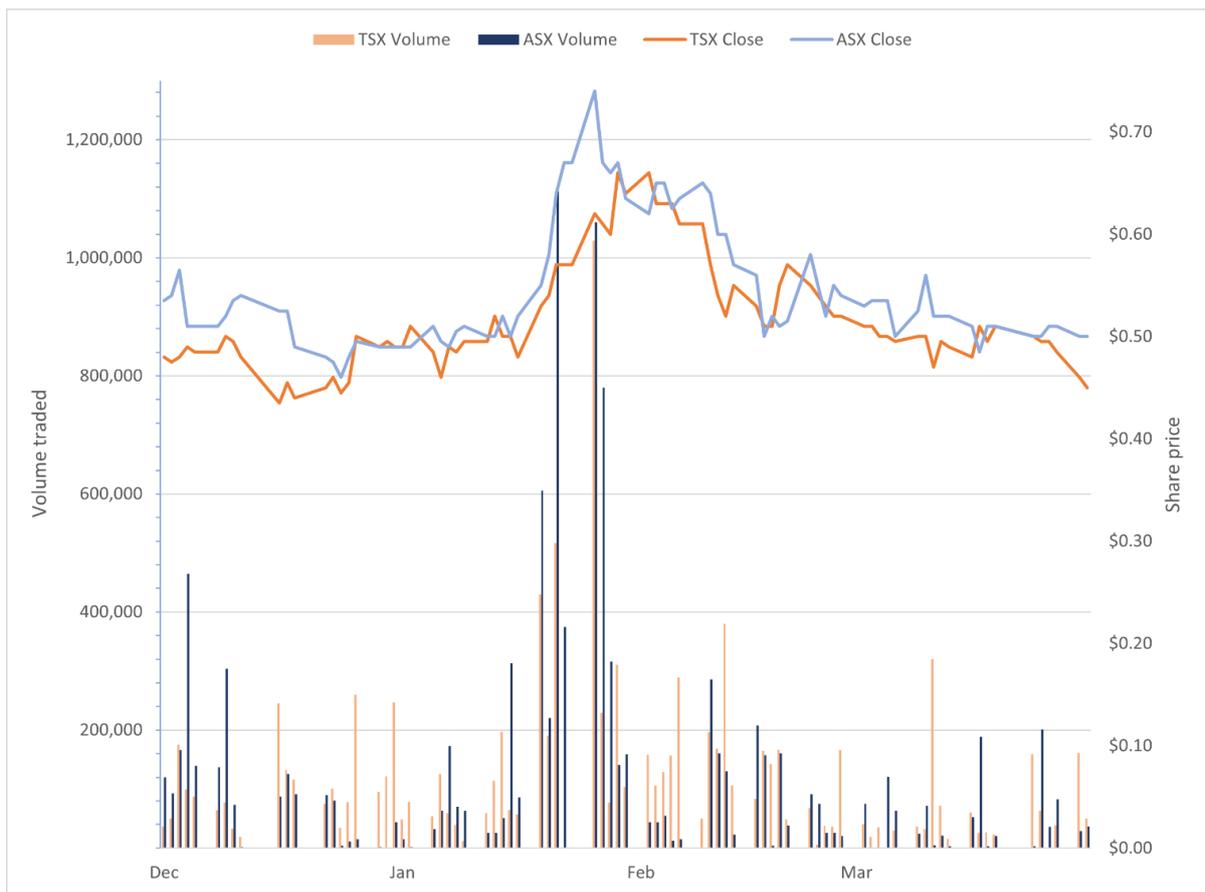




Share Price

Both ASX and TSXV continue to demonstrate reasonably synchronised share price trading patterns for MIO and MMS. Although Macarthur's share price has pulled back over the course of February and March, off the high that was reached after the announcement of the MOU with Southern Ports Authority, this may largely be reflective of market expectations regarding announced progress on both the Feasibility Study and anticipation of an announcement of a pathway to early DSO production. Shareholders can be assured that both objectives continue to be the subject of the highest focus by Management during 2021.

A summary of MIO/MMS trading activity for March 2021 is shown below:



Andrew Bruton, Chief Executive Officer of Macarthur Minerals commented:

"The Company has been implementing an exciting agenda of value-driving objectives for the 2021 calendar year. I was surprised the market for MMS and MIO equities has retreated off the high generated by the announcement of the Port MOU.

Progress on the Lake Giles Iron Project is tracking well. As I committed in the last Quarterly Update, the focus on completing the Feasibility Study for our magnetite operations is paramount, and regular updates have been provided to the market in this area. The Company continues to materially progress commercial negotiations for infrastructure location and port access, allowing the Company to focus on finalising the necessary metallurgical test work and process flow for magnetite beneficiation, together with the engineering design works for the magnetite process plant and the non-process infrastructure required for the development of the mine.



In addition, the Company's Managing Director, Mr Joe Phillips, has been focused on repositioning the Company's non-iron ore Pilbara and Nevada asset portfolios, ensuring that the Company can maximise the value of these assets for the benefit of shareholders. Our shareholders will recall that during the last reporting period a transaction involving the Pilbara assets was announced, but an independent valuation placed a materially higher value on these assets than was reflected in that deal. As a consequence of the original transaction not proceeding, the Company is currently examining options to unlock the value of the Company's Pilbara assets via a separate listing on the ASX. The Company anticipates that a spin-out of the Pilbara tenements through an ASX listing has the potential to deliver a superior outcome for Macarthur and its shareholders.

Macarthur has a very active year planned and I will keep shareholders across key developments, including regular updates on the continued progress of our Feasibility Study for Lake Giles and planned early hematite mining intentions."

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). The JORC reporting tables and Competent Person statement for the magnetite and hematite mineral resources have previously been disclosed in ASX market announcements dated 12 August 2020 and 5 December 2019. 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 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.