

CHAMPION IRON SIGNS A LETTER OF INTENT WITH CATERPILLAR FOR ADVANCED DRILLING TECHNOLOGIES AT ITS BLOOM LAKE MINE

Montréal, August 16, 2021 - Champion Iron Limited (TSX: CIA) (ASX: CIA) (OTCQX: CIAFF) ("Champion" or the "Company") is pleased to announce that it has signed a Letter of Intent with Caterpillar Inc. (NYSE: CAT) ("Caterpillar") to implement artificial intelligence based Advanced Drilling Technologies (the "Technologies") on Cat equipment at its Bloom Lake Mine ("Bloom Lake").

The project will progressively implement a remote-controlled, semi-autonomous and fully autonomous Cat electric drilling fleet, utilizing the Technologies engineered, designed, and/or integrated by Caterpillar. With Champion contributing its experienced workforce, and Caterpillar's independent dealer, Toromont Cat, its aftermarket support, the collaboration will aim to optimize Bloom Lake's operational productivity and reduce energy consumption, while demonstrating the capabilities of Caterpillar's advanced drilling technologies. A Drill-to-Mill strategy ("D2M") is expected to be deployed based on a series of tightly integrated systems, driven by Cat® MineStar™ solutions, designed to optimize the drilling, loading and hauling processes. D2M is focused on delivering improved milling performance by supplying optimized mill feed, while contending with dynamic operational conditions.

Using real-time data, artificial intelligence and analytics, Caterpillar's integrated technology will support Champion's ability to assess the status of machines, technologies, and material to enable more timely and accurate operational decisions and consistent execution across Champion's entire mining value chain. The goal of the collaborative effort will be to deliver a fully integrated drill-to-mill technology solution powered by data connectivity and advanced analytics to ultimately improve workflow between the mine and plant, providing a more efficient end-to-end enterprise process that delivers more consistent raw material for final product specification requirements.

Champion's CEO, Mr. David Cataford said, "We are honoured to collaborate with industry leaders like Caterpillar and Toromont Cat, and are confident that our workforce's proven operational expertise and ingenuity will be an asset in deploying these technologies. The aim and vision of improving mining practices and ultimately reducing waste and energy use is the foundation of this collaboration. The entire Bloom Lake team has already demonstrated its ability to operate at a consistently high level, since commissioning the mine in 2018. In doing so, we have continuously strived to improve operations utilizing the best existing and new prospective mining technologies. Drill-to-mill aligns with our core value of respecting the land that we exploit, as it will enable us to responsibly extract non-renewable resources using the best means possible."

About Champion Iron Limited

The Company, through its subsidiary Quebec Iron Ore Inc., owns and operates the Bloom Lake Mining Complex, located on the south end of the Labrador Trough, approximately 13 km north of Fermont, Québec. Bloom Lake is an open-pit truck and shovel operation with a concentrator, and it ships iron ore concentrate from the site by rail, initially on the Bloom Lake Railway, to a ship loading port in Sept-Îles, Québec. The Bloom Lake Phase I plant has a nameplate capacity of 7.4 Mtpa and produces a high-grade 66.2% Fe iron ore concentrate with low contaminant levels, which has proven to attract a premium to the Platts IODEX 62% Fe iron ore benchmark. In addition to the partially completed Bloom Lake Phase II expansion project, Champion also controls a portfolio of exploration and development projects in the Labrador Trough, including the Kamistiatusset iron ore project located a few kilometres south east of Bloom Lake, and the Consolidated

Fire Lake North iron ore project located approximately 40 km south of Bloom Lake. The Company sells its iron ore concentrate globally, including to customers in China, Japan, the Middle East, Europe, South Korea, India and Canada.

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For additional information on Champion Iron Limited, please visit our website at: www.championiron.com.

This press release has been authorized for release to the market by the CEO of Champion Iron Limited, David Cataford.

Forward-Looking information

This press release includes certain information that may constitute “forward-looking information” under applicable securities legislation. All statements, other than statements of historical facts, included in this press release that address future events, developments or performance that Champion expects to occur, including statements related to the implementation of new drilling fleet and the Drill-to-Mill strategy and related drill-to-mill technology solution; the implementation of Caterpillar’s technologies and their expected benefits; the optimization of Bloom Lake’s operational productivity, drilling, loading and hauling processes; the reduction of energy consumption and waste; operational efficiencies; and sustainability objectives, are forward-looking statements. Forward-looking statements are statements that are not historical facts and are generally, but not always, identified by the use of words such as “plans”, “expects”, “is expected”, “budget”, “scheduled”, “estimates”, “continues”, “forecasts”, “projects”, “predicts”, “intends”, “anticipates”, “aims”, “targets” or “believes”, or variations of, or the negatives of, such words and phrases, or state that certain actions, events or results “may”, “could”, “would”, “should”, “might” or “will” be taken, occur or be achieved. Although Champion believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such forward-looking statements involve known and unknown risks, uncertainties and other factors, most of which are beyond the control of the Company, which may cause the Company’s actual results, performance or achievements to differ materially from those expressed or implied by such forward-looking statements. Factors that could cause the actual results to differ materially from those expressed in or implied by forward-looking statements include those factors discussed in the section entitled “Risk Factors” of the Company’s 2021 Annual Information Form and the risks and uncertainties discussed in the Company’s management’s discussion and analysis for the year ended March 31, 2021, both available on SEDAR at www.sedar.com, the ASX at www.asx.com.au and the Company’s website at www.championiron.com. There can be no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such forward-looking information. Accordingly, readers should not place undue reliance on forward-looking information. All of Champion’s forward-looking information contained in this press release is given as of the date hereof and is based upon the opinions and estimates of Champion’s management and information available to management as at the date hereof. Champion disclaims any intention or obligation to update or revise any of its forward-looking information, whether as a result of new information, future events or otherwise, except as required by law.