

## NEWS RELEASE

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FOR IMMEDIATE RELEASE

### **Metallurgy Test Work Demonstrates Significant Flow Sheet Improvements and DR Grade Concentrate Potential**

GILBERT, MN, June 16, 2023 – MagIron LLC (“MagIron” or the “Company”) is pleased to announce that it has successfully completed an extensive campaign of metallurgical test work at laboratory level (“Test Work”) for its 100% owned Plant 4 iron ore project. The results have confirmed a new process flowsheet that demonstrated the potential to double the historical iron recovery achieved at Plant 4 and to produce Direct Reduction (“DR”) grade iron concentrate.

The Test Work was performed under MagIron’s direction by independent experts at the Natural Resources Research Institute (“NRRI”) of the University of Minnesota with assistance from Canadian based Soutex Inc.

The new Plant 4 process flowsheet has been designed to achieve DR grade concentrate with combined SiO<sub>2</sub> and Al<sub>2</sub>O<sub>3</sub> levels below the steel industry’s DR grade standard of 2.5%.

The Test Work demonstrated the potential to produce high-grade concentrate at Plant 4 that, if used to produce DR pellets using a silica-free binder and a low amount of flux, as is customary, could produce a pellet chemistry with an Fe content in excess of 67.5% Fe and a combined silica and alumina content equal or below 2.5%. Furthermore, the Test Work results produced final concentrates at iron recoveries ranging from 82% for DR grade to 88% for Blast Furnace grade.

Upon demonstration of the results at scale, the MagIron product would represent very high-quality concentrate which once pelletized could be suitable feedstock for DRI shaft furnaces that feed Electric Arc Furnaces (“EAF”).

Larry Lehtinen, CEO of MagIron said, “The indicative results of this extensive test work program support the attractive economics for our proposed restart of Plant 4. This significant advancement of the Plant 4 flow sheet together with the high iron content of feed stock, short crude ore haul distances, and lack of traditional mining steps of stripping, drilling, blasting, and primary crushing suggest that Plant 4 concentrate could be very competitive globally. Together with the NRRI and Soutex, we have completed rigorous testing which has demonstrated Plant 4’s potential to produce DR grade pellet feed which are needed to support the burgeoning EAF market striving to decarbonize the global steel industry.”

He added, “We now will work towards plant level testing of the new flowsheet using existing equipment in Plant 4 to replicate these lab-based results at scale. In parallel, we continue to make advancements in financing, engineering, permitting and minerals licensing and we look forward to providing further updates on our progress shortly.”

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## **About MagIron**

MagIron was established to support and accelerate the decarbonization of the steel industry by becoming a key supplier of high quality, low carbon iron units which will be critical for the future success and decarbonization of the US steel industry. The Company is focused on the restart of Plant 4, a modern, past-producing iron ore concentrator benefiting from over \$170 million of prior investment. The facility has previously operated at an annualized run-rate of approximately 2.0 million tonnes per annum (“mtpa”) of BF grade concentrate and was designed to expand to 3.0 mtpa relatively quickly and at low capital intensity. Plant 4 is designed to process previously discarded waste materials from historical mining operations and convert such feed materials into high grade, low impurity iron ore concentrate. Given the significant historical mining operations across the Mesabi Iron Range in northern Minnesota, there are vast amounts of waste material close to Plant 4, which are suitable as feedstock to support a multi-decade business plan.