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# **Defense Metals Completes Successful Phase I Pilot Plant Work**

**News Release - Vancouver, British Columbia – April 12, 2023**: Defense Metals Corp. ("**Defense Metals**" or the "**Company**"; TSX-V:DEFN / OTCQB:DFMTF / FSE:35D) is pleased to announce that the Phase I of its hydrometallurgical pilot plant at SGS Lakefield has been successfully completed.

John Goode, Consulting Metallurgist to Defense Metals and who attended the pilot plant, commented:

"This first fully integrated pilot plant demonstration of the proposed Wicheeda hydrometallurgical process delivered exactly what was required of it. We have confirmed the general workability of the process, optimized certain design parameters, and identified areas that will be improved ahead of the Phase II pilot plant. The SGS Lakefield team did an excellent job of construction and operation of the circuit, and their efforts are much appreciated."

The main objective of Phase I of the pilot plant was to test the flowsheet for operability and identify any changes that might be required before a longer test campaign. During the five days of continuous operation, the parameters for the various unit operations were varied slightly to allow optimization of the circuit ahead of the Phase II pilot plant run scheduled for late-April 2023.

Assays are still being received and evaluation of the results has not yet been finalized. However, to date it can be reported that the extraction of Pr (praseodymium) and Nd (neodymium) from the acid bake calcine was in excess of 90%, the impurity removal circuits were very efficient, and reagent regeneration and water recirculation were effective. Minor changes will be made to the circuit ahead of Phase II and an alternative product precipitant will be used.

### Methodology

The fully integrated Pilot Plant included sulphuric acid baking, water leaching, three stages of impurity removal, rare earth precipitation, magnesia regeneration and recycling, and process water recycle. The plant ran continuously and without interruption for 24 h/day over a total run time of 110 hours. Operations were handled by a total of ten SGS technicians and metallurgists on each of two shifts managed by senior day-shift staff.

#### **Qualified Person**

The scientific and technical information contained in this news release, as it relates to the metallurgical aspects of the Wicheeda Rare-Earth Project, has been reviewed and approved by John Goode, P. Eng., who is a Qualified Person as defined by National Instrument 43-101 and who has provided the technical information relating to metallurgy in this news release.

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# **About the Wicheeda REE Property**

Defense Metals 100% owned, 4,262-hectare (~10,532-acre) Wicheeda Light REE property is located approximately 80 km northeast of the city of Prince George, British Columbia; population 77,000. The Wicheeda REE Project is readily accessible by all-weather gravel roads and is near infrastructure, including hydro power transmission lines and gas pipelines. The nearby Canadian National Railway and major highways allow easy access to the port facilities at Prince Rupert, the closest major North American port to Asia.

The 2021 Wicheeda REE Project Preliminary Economic Assessment technical report ("PEA") outlined a robust after-tax net present value (NPV@8%) of \$517 million and an 18% IRR<sup>1</sup>. This PEA contemplated an open pit mining operation with a 1.75:1 (waste:mill feed) strip ratio providing a 1.8 Mtpa ("million tonnes per year") mill throughput producing an average of 25,423 tonnes REO annually over a 16 year mine life. A Phase 1 initial pit strip ratio of 0.63:1 (waste:mill feed) would yield rapid access to higher grade surface mineralization in year 1 and payback of \$440 million initial capital within 5 years.

## **About Defense Metals Corp.**

Defense Metals Corp. is a mineral exploration and development company focused on the acquisition, exploration and development of mineral deposits containing metals and elements commonly used in the electric power markets, defense industry, national security sector and in the production of green energy technologies, such as, rare earths magnets used in wind turbines and in permanent magnet motors for electric vehicles. Defense Metals owns 100% of the Wicheeda Light Rare Earth Element Deposit located near Prince George, British Columbia, Canada. Defense Metals Corp. trades in Canada under the symbol "DEFN" on the TSX Venture Exchange, in the United States, under "DFMTF" on the OTCQB and in Germany on the Frankfurt Exchange under "35D".

Defense Metals is a proud member of Discovery Group. For more information please visit: http://www.discoverygroup.ca/

#### For further information, please contact:

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<sup>1</sup> Independent Preliminary Economic Assessment for the Wicheeda Rare Earth Element Project, British Columbia, Canada, dated January 6, 2022, with an effective date of November 7, 2021, and prepared by SRK Consulting (Canada) Inc. is filed under Defense Metals Corp.'s Issuer Profile on SEDAR (www.sedar.com).

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#### Cautionary Statement Regarding "Forward-Looking" Information

This news release contains "forward-looking information or statements" within the meaning of applicable securities laws, which may include, without limitation, statements relating to advancing the Wicheeda REE Project, the expected benefits and outcomes of the hydrometallurgical pilot plant, the expected completion of the hydrometallurgical pilot plant and the expected timelines, the technical, financial and business prospects of the Company, its project and other matters. All statements in this news release, other than statements of historical facts, that address events or developments that the Company expects to occur, are forward-looking statements. 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 actual results may differ materially from those in the forward-looking statements. Such statements and information are based on numerous assumptions regarding present and future business strategies and the environment in which the Company will operate in the future, including the price of rare earth elements, the anticipated costs and expenditures, the ability to achieve its goals, that general business and economic conditions will not change in a material adverse manner, that financing will be available if and when needed and on reasonable terms. Such forward-looking information reflects the Company's views with respect to future events and is subject to risks, uncertainties and assumptions, including the risks and uncertainties relating to the interpretation of exploration and metallurgical results, risks related to the inherent uncertainty of exploration and development and cost estimates, the potential for unexpected costs and expenses and those other risks filed under the Company's profile on SEDAR at www.sedar.com. While such estimates and assumptions are considered reasonable by the management of the Company, they are inherently subject to significant business, economic, competitive and regulatory uncertainties and risks. Factors that could cause actual results to differ materially from those in forward looking statements include, but are not limited to, continued availability of capital and financing and general economic, market or business conditions, adverse weather and climate conditions, failure to maintain or obtain all necessary government permits, approvals and authorizations, failure to maintain community acceptance (including First Nations), risks relating to unanticipated operational difficulties (including failure of equipment or processes to operate in accordance with specifications or expectations, cost escalation, unavailability of personnel, materials and equipment, government action or delays in the receipt of government approvals, industrial disturbances or other job action, and unanticipated events related to health, safety and environmental matters), risks relating to inaccurate geological, metallurgical and engineering assumptions, decrease in the price of rare earth elements, the impact of Covid-19 or other viruses and diseases on the Company's ability to operate, an inability to predict and counteract the effects of COVID-19 on the business of the Company, including but not limited to, the effects of COVID-19 on the price of commodities, capital market conditions, restriction on labour and international travel and supply chains, loss of key employees, consultants, or directors, increase in costs, delayed results, litigation, and failure of counterparties to perform their contractual obligations. The Company does not undertake to update forward-looking statements or forward-looking information, except as required by law.