

## VANADIUMCORP TO ESTABLISH A VANADIUM ELECTROLYTE MANUFACTURING TEST FACILITY

Vancouver, British Columbia – December 13, 2022 – VanadiumCorp Resource Inc. (TSX-V: VRB) (OTCBB: APAFF) (FSE: NWN) (the "Company") is pleased to announce the commencement of engineering design and site selection for a vanadium electrolyte manufacturing facility to be located near Sherbrooke, Quebec. The Company also reports that the field program at its Lac Doré property near Chibougamau, Quebec, has collected representative titanomagnetite-mineralized samples from historical trenches to commence advanced metallurgical tests.

VanadiumCorp management has assessed the supply and demand outlook for vanadium to the years 2030 and 2050. We see a strong case for advancing the Lac Doré vanadium-titanium-iron mining project and, in parallel, developing a value-added manufacturing capacity for vanadium electrolytes. Concurrent advancement will maximize the value of our mineral deposit and our knowledge base in Vanadium Redox Flow Batteries ("VRFBs").

Lac Doré project work in October-November resampled historical trenches in the titanomagnetite horizons. A large sample is available now for grinding and separation tests. Additional hydrometallurgical testing is planned to commence in January 2023 to test the quality of our mineral concentrates and optimize the future production of vanadium and titanium strategic metals.

Engineering design and site selection have commenced for a modular vanadium electrolyte manufacturing facility near Sherbrooke, Quebec. Led by Company Directors Gilles Dupuis, P. Eng. and Gilles Y. Champagne, Ph.D., our engineering scoping defines an initial vanadium electrolyte production capacity of 315,000 litres/year (provisioning about 6.3 MWh of energy storage capacity in VRFBs). Quality testing of Lac Doré vanadium pentoxide product will be the primary use for the facility. In a later stage, cold-weather demonstrations of VRFBs in Canada's remote northern communities, farms, and off-grid industrial locations will test the Company's final electrolyte formulations.

Deployment of VRFBs for long-duration energy storage will expand dramatically as worldwide energy production shifts to renewables, according to consensus amongst industry, the International Energy Association (IEA), and a recent MIT Research Review (2022). Under the IEA's **Net-Zero by 2050 Roadmap**, the share of power generated from renewables – mainly solar, wind and hydropower -- would rise from current levels of around 10 percent to 60 percent. Fossil fuel usage would shrink from almost 80% to about 20%. Increasingly, governments require that renewable power projects have co-located long-duration storage capacity --a technical strength and cost advantage of VRFBs.

The International Monetary Fund (IMF) notes that vanadium is 75% undersupplied for that 2050 Net-Zero goal. The IMF also reports that current vanadium production is the most regionally concentrated of all Net-Zero metals.

The key to the adequate supply of vanadium and titanium strategic metals will be adopting alternate, more efficient extractive technologies.

# About VanadiumCorp

VanadiumCorp Resource Inc. is a mineral exploration company headquartered in Quebec and Vancouver, Canada, with 100% ownership of two strategic vanadium, titanium, and iron properties in Quebec. The Iron T is near Matagami, and the Company's flagship Lac Doré property is near Chibougamau.

Our executive chairman, Mr. Ian Mallory, recently sat down with Greenshoe Minute host Mark Bunting to provide a corporate update on latest Company developments. The Greenshoe Minute update is currently airing nationally on BNN Bloomberg television. The video can be viewed at: <u>https://youtu.be/-gjU26\_osDc</u>

Definition diamond-drilling and resampling surface trenching on the Lac Doré property by the Company culminated in preparing a Technical Report and Mineral Resource Estimate by CSA Global Consultants Canada Limited ("CSA"), with Dr. Luke Longridge, P. Geo. as the lead consultant. CSA produced a Technical Report titled "**Lac Doré Project, Chibougamau, Québec, Canada, December 10, 2020**." The full technical report is available on the Company's website and SEDAR. Longridge recommended a program of step-out diamond drilling and metallurgical testing.

The Technical Report describes Measured and Indicated Mineral Resources of 215 million tonnes containing 53 million tonnes of recoverable vanadiferous titanomagnetite. The titanomagnetite concentrate is estimated to have 1.49 billion pounds of V2O5 (not factored for recoveries from titanomagnetite).

VanadiumCorp also owns 100% of the newly patented hydrometallurgical process, VEPT (the "VanadiumCorp, Electrochem, Process Technology"), invented by Dr. Francois Cardarelli, that consists of digesting vanadiferous feedstocks into concentrated sulfuric acid. The technology addresses the recovery of vanadium, titanium, ferrous sulphate, and silica products from mineral concentrate feedstocks, such as titanomagnetite. The VEPT process is also valid for recovering vanadium from industrial residues, such as slags from oxygen blast furnaces (BOF-slags). Dr. Cardarelli's sulphuric acid process is novel because it adapts a proven and widely used industrial process to extract valuable metals from titanomagnetite and industrial residues.

### **Qualified Person**

Mr. Paul McGuigan, P. Geo., a "Qualified Person" (as defined in NI 43-101 -Standards for Disclosure for Mineral Projects) and CEO and Director of the Company, has reviewed and approved the technical disclosures in this news release.

### ON BEHALF OF THE BOARD OF VANADIUMCORP

Paul McGuigan, P. Geo

Director, Chief Executive Officer

### Website: www.vanadiumcorp.com

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## **Forward-Looking Statements**

This corporate news release contains certain forward-looking statements and information relating to VanadiumCorp Resource Inc. ("the Company") and its operations that are based on the beliefs of its management as well as assumptions made by and information currently available to the Company. When used in this document, the words "anticipate," "believe," "budget," "estimate," "expect," "intends," "plans," "potential," and similar expressions, as they relate to the Company or its management and operations, are intended to identify forward-looking statements.

These forward-looking statements or information relate to, among other things: the Company's future financial and operational performance; the sufficiency of the Company's current working capital, anticipated cash flow or its ability to raise necessary funds; the anticipated amount and timing of work programs; our expectations with respect to future exchange rates; the estimated cost of and availability of funding necessary for sustaining capital; forecast capital and non-operating spending; and the Company's plans and expectations for its property, exploration and community relations operations.

These forward-looking statements and information reflect the Company's current beliefs as well as assumptions made by, and information currently available to the Company and are necessarily based upon a number of assumptions that, while considered reasonable by the Company, are inherently subject to significant operational, business, economic, competitive, political, regulatory, and social uncertainties and contingencies. These assumptions include: cost estimates for exploration programs; cost of drilling programs; prices for vanadium, titanium and iron metals remaining as estimated; currency exchange rates remaining as estimated; capital estimates; our expectation that work towards the establishment of mineral resource estimates and the assumptions upon which they are based will produce such estimates; prices for energy inputs, labour, materials, supplies and services (including transportation); no labour-related disruptions at our operations; no unplanned delays or interruptions in scheduled work; all necessary permits, licenses and regulatory approvals for our operations being received in a timely manner and can be maintained; and our ability to comply with environmental, health and safety laws, particularly given the potential for modifications and expansion of such laws. The foregoing list of assumptions is not exhaustive.

Forward-looking statements and information involve known and unknown risk, uncertainties, assumptions, and other factors which may cause the actual results, performance, or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Although the Company has attempted to identify important factors that could cause actual results or events to differ materially from those expressed or implied in the forward-looking statements, there may be other factors, such as the coronavirus global pandemic, which could cause results not to be as anticipated, estimated, described, or intended. Investors are cautioned against attributing undue certainty or reliance on forward-looking statements or information.

Forward-looking statements and information contained herein are made as of the date of the latest MD&A and the Company disclaims any intent or obligation to update or revise forward-looking statements or information, whether as a result of new information, future events, or to reflect changes in assumptions or in circumstances or any other events affecting such statements or information, other than as required by applicable law.

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