NioCorp Reports Significant Advance in Plan to Process Critical Minerals in Nebraska

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If proven at the demonstration plant scale, this advance may result in major improvements in the Elk Creek Project, incl elimination of entire steps in the Project's current processing flowsheet

Process improvements also point to a potentially efficient extraction process for recovery and purification of rare earth elements, in addition to the Project's planned production of niobium, scandium, and titanium

CENTENNIAL, March 14, 2022 - NioCorp Developments Ltd. ("NioCorp" or the "Company") (TSX: NB; OTCQX: NIOBF pleased to announce a significant advance in its ongoing process optimization and rare earth recovery test work being conducted for the Elk Creek Superalloy Materials Project (the "Project") by L3 Process Development ("L3").

L3 has conducted bench-scale testing at its facility in the province of Quebec, Canada to optimize the Project's current processing flowsheet and demonstrate that NioCorp can recover and produce high purity rare earth elements, such as neodymium-praseodymium, dysprosium, and terbium, in addition to the niobium, scandium, and titanium products alrea planned for production by the Company, once Project financing is secured.

L3's bench-scale testing recently succeeded in showing the promise of a much more efficient process for recovering nio and titanium from Elk Creek ore following the leaching and acid baking steps in the current flowsheet. Among other thin the process removes iron earlier in the process. If shown to be technically and economically feasible at demonstration s this process could potentially result in the following outcomes:

- Improved recovery rates for niobium and titanium, which could potentially increase revenue derived from those products;
- The production of higher purity niobium and titanium intermediates, which may lower costs in the Project's pyrometallurgical plant;
- The production of a higher purity titanium product, which could open up new markets for NioCorp;
- Elimination of entire steps in the Project's current processing flowsheet, such as those related to neutralization an onsite acid production;
- Elimination of processing inputs such as iron powder; and
- Reduced waste generated in the ferroniobium pyrometallurgical plant.

Additionally, the higher purity niobium and titanium intermediates produced by this process could move NioCorp closer the eventual production of high purity niobium and titanium materials needed for next-generation of Lithium-Ion batterie NioCorp already plans to produce high purity scandium, which also is being investigated for possible use in next-genera solid-state Lithium-Ion batteries (see this).

All of the preliminary findings noted in this news release must be confirmed with additional testing, and there can be no assurance that these outcomes will in fact be realized.

"L3's work to further optimize the Elk Creek Project's flowsheet in preparation for final engineering, and to map out a pathway to the potential production of high-purity rare earth elements, has demonstrated the potential to make some ve important improvements in how we produce all of our planned products," said Scott Honan, NioCorp's Chief Operating Officer. "If these flowsheet enhancements prove out at the demonstration plant level, they could lead to some very significant increases in pay metal recovery rates and potentially large reductions in capital and operating expenses. We forward to validating these preliminary findings at the demonstration plant level and to communicating the final results o effort when completed."

Added Eric Larochelle, Co-Owner of L3: "The latest achievement in the bench-scale program provides promising result regarding the quality of the products this process can potentially provide."

The next steps in L3's work metallurgical testwork involve, among other things, measuring recovery rates for targeted ra earth elements in a demonstration scale plant, which it is constructing in Canada. This testing is expected to produce re that will determine the technical and economic feasibility of adding rare earth products to the Project's existing product s and other process improvements.

The information contained in this news release does not change any of the technical or economic findings contained in NioCorp's April 16, 2019, NI 43-101 Technical Report, Feasibility Study, Elk Creek Superalloy Materials Project, Nebras Work to update the Project's Mineral Resource to include data on rare earth elements in the deposit is ongoing and is

expected to be released to the public upon completion.

Qualified Person:

Eric Larochelle, B.Eng., Hydrometallurgy Specialist (L3 Process Development), a Qualified Person as defined by Natio Instrument 43-101 has read and approved the technical information contained in this news release and verified the data disclosed in this news release.

@NioCorp $NB.TO $NIOBF #Niobium #Scandium #ElkCreek #rareearth #neodymium #terbium #dysprosium

For More Information

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About NioCorp

NioCorp is developing a superalloy materials project in Southeast Nebraska that will produce Niobium, Scandium, and Titanium. The Company also is evaluating the potential to produce several rare earth byproducts from the Project. Niob is used to produce superalloys as well as High Strength, Low Alloy ("HSLA") steel, which is a lighter, stronger steel use automotive, structural, and pipeline applications. Scandium is a superalloy material that can be combined with Aluminu make alloys with increased strength and improved corrosion resistance. Scandium is also a critical component of adva solid oxide fuel cells. Titanium is used in various superalloys and is a key component of pigments used in paper, paint a plastics and is also used for aerospace applications, armor, and medical implants. Magnetic rare earths, such as neodymium, praseodymium, terbium, and dysprosium are critical to the making of Neodymium-Iron-Boron ("NdFeB") magnets, which are used across a wide variety of defense and civilian applications.

Cautionary Note Regarding Forward-Looking Statements

Certain statements contained in this document may constitute forward-looking statements, including but not limited to statements regarding the Company's ability to secure sufficient project financing to complete construction and commen operation of the Project; the Company's expectation and ability to produce Niobium, Scandium, Titanium and rare earth products at the Project, the outcome of current recovery process improvement testing, and the Company's expectation such process improvements could lead to greater efficiencies and cost savings in the Project. Such forward-looking statements are based on estimates and assumptions made by the Company in light of its experience and its perception historical trends, current conditions and expected future developments, as well as other factors that the Company belie are appropriate in the circumstances. Readers are cautioned that such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause a change in such forward-looking statements and the ac outcomes and estimates to be materially different from those estimated or anticipated future results, achievements or position expressed or implied by those forward-looking statements. Risks, uncertainties and other factors that could cau NioCorp's plans or prospects to change include risks related to NioCorp's ability to operate as a going concern; risks re to NioCorp's requirement of significant additional capital; changes in demand for and price of commodities (such as fue electricity) and currencies; changes or disruptions in the securities markets; legislative, political or economic developme the need to obtain permits and comply with laws and regulations and other regulatory requirements; the possibility that actual results of work may differ from projections/expectations or may not realize the perceived potential of NioCorp's projects; risks of accidents, equipment breakdowns and labor disputes or other unanticipated difficulties or interruptions possibility of cost overruns or unanticipated expenses in development programs; operating or technical difficulties in connection with exploration, mining or development activities; the speculative nature of mineral exploration and development, including the risks of diminishing quantities of grades of reserves and resources; the risks involved in the exploration, development and mining business, and the risks set forth in the Company's filings with Canadian securities regulators at www.sedar.com and the SEC at www.sec.gov. NioCorp disclaims any intention or obligation to update or r any forward-looking statements whether as a result of new information, future events or otherwise.

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