NioCorp Achieves Positive Results in Metallurgical Testing of Possible Rare Earth Production at its Elk Creek, Nebraska Project

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CENTENNIAL, Jan. 3, 2022 - NioCorp Developments Ltd. ("NioCorp" or the "Company") (TSX: NB;OTCQX: NIOBF) is pleased to announce positive results from its ongoing metallurgical work regarding the process to extract rare earth elements from ore samples sourced at its Elk Creek Project (the "Project").

Salt Lake City-based L3 Process Development ("L3") has been conducting small scale testing for NioCorp on rare earth recovery and flowsheet improvement and is also building an integrated demonstration plant at its facility in the province of Quebec. To date, L3 has completed several dozen individual tests using portions of a three-tonne representative sample of ore collected from the Elk Creek Project drill core inventory.

Recent efforts by L3 have focused on potential rare earths recovery, including the extraction of rare earth values from the high acidity streams characteristic of those found in the existing Elk Creek niobium / scandium / titanium process flowsheet.

In a recent development, L3 has demonstrated that Scandium can be effectively extracted and separated from the rare earth elements in solution using a phosphate-based extractant. With additional work, this phosphate-based recovery process could be shown capable of replacing the phosphoric acid-based extraction process that is part of the current Project design.

L3 has further demonstrated that the rare earth elements (lanthanum through lutetium, including the magnetic rare earths neodymium, praseodymium, dysprosium, and terbium) can be selectively extracted and separated from the leach solution using an amide-based extractant.

"The data from this most recent solvent extraction testwork is very encouraging," said Tommee Larochelle, Ing. PE, MBA, Chief Technology Officer, L3 Process Development. "Both the phosphate and amide-based extraction testing have performed exactly to plan, and I look forward to continuing our efforts to verify this a cost-effective way to produce commercial rare earth products from the Elk Creek flowsheet."

Additional testing is planned at L3's laboratory to further verify and optimize a rare earth recovery operation for the Elk Creek project as well as establishing metallurgical performance and recovery data for three prospective rare earth products: neodymium/praseodymium oxide, dysprosium oxide, and terbium oxide.

L3 is now in the process of constructing a small-scale integrated demonstration plant at its Quebec facility, which will address hydrometallurgical recommendations from the Company's 2019 Feasibility Study as well as demonstrating potential rare earth recovery operations.

"We are extremely pleased with the progress that L3 has made to date and we look forward to continuing our collaboration with them with the goal of adding additional value from the potential rare earths to the Elk Creek Project's economics," said Scott Honan, NioCorp's Chief Operating Officer.

The information contained in this press release does not change any of the mineral resource or mineral reserve estimates contained in NioCorp's April 16, 2019, NI 43-101 Technical Report, Feasibility Study, Elk Creek Superalloy Materials Project, Nebraska. There has been insufficient work to define a mineral resource with respect to rare earth data and it is uncertain if further work will result in rare earth data being delineated as a mineral resource.

Qualified Person:

Eric Larochelle, B.Eng., Hydrometallurgy Specialist (L3 Process Development), a Qualified Person as defined by National 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. Niobium is used to produce superalloys as well as High Strength, Low Alloy ("HSLA") steel, which is a lighter, stronger steel used in automotive, structural, and pipeline applications. Scandium is a superalloy material that can be combined with Aluminum to make alloys with increased strength and improved corrosion resistance. Scandium is also a critical component of advanced solid oxide fuel cells. Titanium is used in various superalloys and is a key component of pigments used in paper, paint and 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 related to the Company's ability to produce Niobium, Scandium, Titanium and rare earths products at the Elk Creek Superalloy Materials Project, the outcome of current metallurgical testing of a phosphate-based recovery process, and the Company's expectation that a phosphate-based recovery process 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 of historical trends, current conditions and expected future developments, as well as other factors that the Company believes 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 actual 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 cause NioCorp's plans or prospects to change include risks related to NioCorp's ability to operate as a going concern; risks related to NioCorp's requirement of significant additional capital; changes in demand for and price of commodities (such as fuel and electricity) and currencies; changes or disruptions in the securities markets; legislative, political or economic developments; 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; the 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 revise any forward-looking statements whether as a result of new information, future events or otherwise.

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