

NioCorp Completes Successful Initial Testing of Rare Earth Permanent Magnet Recycling

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Recycling Rare Earth Permanent Magnets by NioCorp Could Help Boost U.S. Production of Heavy Rare Earths, Which Are Currently Produced Almost Entirely in Asia

CENTENNIAL, October 30, 2024 - [NioCorp Developments Ltd.](#) ("NioCorp" or the "Company") (NASDAQ:NB) has completed successful testing of its proposed hydrometallurgical process for producing critical minerals at the proposed Elk Creek Critical Minerals Project (the "Elk Creek Project") in southeast Nebraska for use in recycling post-consumer permanent rare earth magnets.

The bench-scale testwork was conducted by L3 Process Development ("L3") at NioCorp's demonstration plant in Trois Rivieres, Quebec. The L3 team was able to demagnetize and grind up permanent rare earth magnets and then extract the contained rare earth elements ("REEs") from the magnet using the same process that NioCorp intends to employ in processing and extracting multiple critical minerals from Elk Creek Project ore.

"This successful outcome goes a long way to establish the viability of using the Elk Creek Project production process not only to extract and purify multiple critical minerals streams from our ore body, but also to recycle post-consumer rare earth permanent magnets into separated rare earth oxides that can then be used to produce new magnets for industries such as automotive, aerospace, robotics, and many others," said Mark A. Smith, CEO and Chairman of NioCorp. "Adding these recycling capabilities promises to dramatically reduce the net CO₂ emissions profile of the manufacturing many different consumer and defense technologies, but also can deliver powerful benefits from circular economics to NioCorp's customers and to entire supply chains."

"It also has the potential to help boost the domestic production of heavy rare earths in the U.S.," added Mr. Smith.

The Elk Creek Project is designed to use a whole ore leach process to produce its targeted products, which include niobium, scandium, titanium and, potentially, magnetic rare earth oxides.¹ The Elk Creek Project mineral resource contains the largest indicated terbium resource in the U.S., as well as the 2nd largest indicated neodymium-praseodymium and dysprosium resources in the U.S.²

"As this effort proceeds, we will be talking with prospective customers to gauge interest in a prospective magnet recycling program," said Scott Honan, NioCorp's Chief Operating Officer. "There are many different grades of rare earth permanent magnets, and all have different compositions. As such, our ultimate goal would be to ensure that we can take in post-consumer magnets and be able to process those into separated magnetic rare earth oxides that can meet the specifications and product quality standards of our customers."

Mr. Honan added: "While today's advanced NdFeB sintered magnets can contain as little as 0.5% to 1% heavy rare earth content, older NdFeB magnets generally contain much higher heavy rare earths content - 10% or more. As those older magnets enter the recycling stream, that may provide us with the ability to produce more heavy rare earths oxides for use in new magnets. NioCorp's would essentially be 'upcycling' magnetic materials into new, more efficient magnets, where most other recyclers today appear focused on 'downcycling' post-consumer magnetic materials given that they don't intend to separate those materials into pure constituent elements."

As no economic analysis has been completed on the rare earth mineral resource comprising the Elk Creek Project, further testing and studies are required before determining whether extraction of REEs can be reasonably justified and economically viable after taking account of all relevant factors.

Qualified Persons:

Eric Larochelle, B.Eng., Co-Owner, L3 Process Development, a Qualified Person as defined by National Instrument 43-101, has reviewed and approved the technical information, and verified the data contained in this news release.

Scott Honan, M.Sc., SME-RM, COO of NioCorp Developments Ltd., a Qualified Person as defined by National Instrument 43-101, has reviewed and approved the technical information contained in the news release.

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FOR MORE INFORMATION:

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ABOUT NIOCORP

NioCorp is developing the Elk Creek Project that is expected to produce niobium, scandium, and titanium. The Company also is evaluating the potential to produce several rare earths from the Elk Creek Project. Niobium is used to produce specialty alloys as well as High Strength, Low Alloy steel, which is a lighter, stronger steel used in automotive, structural, and pipeline applications. Scandium is a specialty metal 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 lightweight alloys 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.

FORWARD-LOOKING STATEMENTS

This press release contains forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995 and forward-looking information within the meaning of applicable Canadian securities laws. Forward-looking statements may include, but are not limited to, statements regarding NioCorp's plans to investigate the feasibility of recycling post-consumer NdFeB magnets and the expected benefits therefrom and capacity therefor; the potential to produce rare earth products for the Elk Creek Project; the technical and economic feasibility of separating rare earth oxides; NioCorp's expectation of producing niobium, scandium, and titanium, and the potential of producing rare earths, at the Elk Creek Project; and NioCorp's ability to secure sufficient project financing to complete construction of the Elk Creek Project and move it to commercial production. Forward-looking statements are typically identified by words such as "plan," "believe," "expect," "anticipate," "intend," "outlook," "estimate," "forecast," "project," "continue," "could," "may," "might," "possible," "potential," "predict," "should," "would" and other similar words and expressions, but the absence of these words does not mean that a statement is not forward-looking.

The forward-looking statements are based on the current expectations of the management of NioCorp and are inherently subject to uncertainties and changes in circumstances and their potential effects and speak only as of the date of such statement. There can be no assurance that future developments will be those that have been anticipated. Forward-looking statements reflect material expectations and assumptions, including, without limitation, expectations and assumptions relating to: NioCorp's ability to receive sufficient project financing for the construction of the Elk Creek Project on acceptable terms or at all; NioCorp's ability to recognize the potential benefits of recycling post-consumer NdFeB magnets; the future price of metals; the stability of the financial and capital markets; and current estimates and assumptions regarding the business

combination with GX Acquisition Corp. II (the "Business Combination") and the standby equity purchase agreement (the "Yorkville Equity Facility Financing Agreement" and, together with the Business Combination, the "Transactions") with YA II PN, Ltd., an investment fund managed by Yorkville Advisors Global, LP, and their benefits. Such expectations and assumptions are inherently subject to uncertainties and contingencies regarding future events and, as such, are subject to change. Forward-looking statements involve a number of risks, uncertainties or other factors that may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements. These risks and uncertainties include, but are not limited to, those discussed and identified in public filings made by NioCorp with the U.S. Securities and Exchange Commission and with the applicable Canadian securities regulatory authorities and the following: NioCorp's ability to operate as a going concern; NioCorp's requirement of significant additional capital; NioCorp's ability to receive sufficient project financing for the construction of the Elk Creek Project on acceptable terms or at all; NioCorp's ability to receive a final commitment of financing from the Export-Import Bank of the United States on the anticipated timeline, on acceptable terms, or at all; NioCorp's ability to recognize the anticipated benefits of the Transactions, including NioCorp's ability to access the full amount of the expected net proceeds of under the Yorkville Equity Facility Financing Agreement; NioCorp's ability to continue to meet the listing standards of The Nasdaq Stock Market LLC; risks relating to NioCorp's common shares, including price volatility, lack of dividend payments and dilution or the perception of the likelihood of any of the foregoing; the extent to which NioCorp's level of indebtedness and/or the terms contained in agreements governing NioCorp's indebtedness or the Yorkville Equity Facility Financing Agreement may impair NioCorp's ability to obtain additional financing; covenants contained in agreements with NioCorp's secured creditors that may affect its assets; NioCorp's limited operating history; NioCorp's history of losses; the material weaknesses in NioCorp's internal control over financial reporting, NioCorp's efforts to remediate such material weaknesses and the timing of remediation; the possibility that NioCorp may qualify as a passive foreign investment company under the U.S. Internal Revenue Code of 1986, as amended (the "Code"); the potential that the Transactions could result in NioCorp becoming subject to materially adverse U.S. federal income tax consequences as a result of the application of Section 7874 and related sections of the Code; cost increases for NioCorp's exploration and, if warranted, development projects; a disruption in, or failure of, NioCorp's information technology systems, including those related to cybersecurity; equipment and supply shortages; variations in the market demand for, and prices of, niobium, scandium, titanium and RE products; current and future offtake agreements, joint ventures, and partnerships; NioCorp's ability to attract qualified management; estimates of mineral resources and reserves; mineral exploration and production activities; feasibility study results; the results of metallurgical testing; the results of technological research; changes in demand for and price of commodities (such as fuel and electricity) and currencies; competition in the mining industry; changes or disruptions in the securities markets; legislative, political or economic developments, including changes in federal and/or state laws that may significantly affect the mining industry; the impacts of climate change, as well as actions taken or required by governments related to strengthening resilience in the face of potential impacts from climate change; the need to obtain permits and comply with laws and regulations and other regulatory requirements; the timing and reliability of sampling and assay data; 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; management of the water balance at the Elk Creek Project site; land reclamation requirements related to the Elk Creek Project; the speculative nature of mineral exploration and development, including the risks of diminishing quantities of grades of reserves and resources; claims on the title to NioCorp's properties; potential future litigation; and NioCorp's lack of insurance covering all of NioCorp's operations.

Should one or more of these risks or uncertainties materialize or should any of the assumptions made by the management of NioCorp prove incorrect, actual results may vary in material respects from those projected in these forward-looking statements.

All subsequent written and oral forward-looking statements concerning the matters addressed herein and attributable to NioCorp or any person acting on its behalf are expressly qualified in their entirety by the cautionary statements contained or referred to herein. Except to the extent required by applicable law or regulation, NioCorp undertakes no obligation to update these forward-looking statements to reflect events or circumstances after the date hereof to reflect the occurrence of unanticipated events.

¹ NioCorp is currently conducting technical and economic analyses on the potential addition of magnetic rare earth oxides to its planned product suite. Final determination of possible rare earth production can be made only after work related to a mineral reserve update, additional engineering, updated project capital and operating cost estimates, and other required information is produced for publication in a new Feasibility Study.

² Indicated mineral resource estimates are based on data from the "Critical Mineral Resources of the United States-Economic and Environmental Geology and Prospects for Future Supply," U.S. Geological Survey, 2017, and from the Company's existing feasibility study, as described in the Company's technical report titled "NI 43-101 Technical Report Feasibility Study, Elk Creek Project, Nebraska", with both an effective date and a report date of June 28, 2022.

SOURCE: NioCorp Developments Ltd.

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