Neotech Metals Corp. Reports Positive Metallurgical Results Demonstrating High Leachability of Rare Earths at its Hecla-Kilmer Project in Ontario, Canada

Vancouver, British Columbia--(Newsfile Corp. - April 1, 2025) - Neotech Metals Corp. (CSE: NTMC) (OTCQB: NTMFF) (FSE: V690) ("Neotech" or "the Company") is pleased to announce positive test results from the ongoing metallurgical studies for the Hecla-Kilmer project from SGS-Lakefield Canada Inc. ("SGS"). Results from 11 batch flotation tests - designed to assess recovery rates, concentrate grades, and leachability under varying conditions - yielded highly encouraging outcomes. In a 6-hour digestion at just 50°C, the test successfully deported between 97-99% of REEs into solution, demonstrating the amenability of the mineralization to low-temperature acid leaching.

In addition to the positive leach test, additional metallurgical results include:

- 75.0% Total Rare Earth Oxide (TREO*) recovery, including consistent recovery of Praseodymium, Neodymium, and other magnet rare earths (PMREO**), as outlined in Table 1 - highlighting the potential for efficient downstream processing.
- **78.0% Niobium (NbIOI) recovery** via gravity separation, confirming amenability to low-cost, conventional beneficiation.
- 89.1% Phosphate (PIOI) recovery, with 100% of phosphate reporting to solution during leaching, indicating potential for a secondary phosphate by-product stream.
- Successful leach test completed using just 36% hydrochloric acid, validating the amenability of the mineralization to conventional acid leach techniques under relatively moderate conditions.

These initial results represent the first-ever metallurgical campaign conducted at Hecla-Kilmer. It is important to note that the data is based on a single leach test. While the outcomes are highly encouraging, further metallurgical work is planned to optimize processing conditions and account for variability in lithology and geochemistry across the broader mineralized system. The next phase of test work will include additional flotation testing, optimization, and enhancement to complement the leach testing, with the goal of improving overall recovery and process efficiency. This next phase of metallurgical studies will focus on validating scalability, refining flow sheet design, and ensuring consistency across representative sample types.

Element	Recovery %	Element	Recovery %
La	74.5	Но	80.2
Се	74.1	Er	76.3
Pr	74.9	Tm	81.1
Nd	76.2	Yb	74.2
Sm	76.8	Lu	70.5
Eu	77.8	Υ	79.1
Gd	78.9	PIOI	89.1
Tb	77.2	NbIOI	78.0
Dy	78.1	TREO (Average)	75.0

Table 1 showing flotation results of rare earth oxides and gravity result of niobium oxide

"In the context of North American rare earth projects, this is a significant milestone for Neotech," said Reagan Glazier, CEO. "These results confirm that the apatite-hosted mineralization at Hecla-Kilmer is not only high-grade but also uniquely leachable - with over 75% total rare earth oxide recovery and up to 99% of the rare earths brought into solution under mild conditions. That kind of metallurgical simplicity is exceptionally rare in this sector and represents a significant de-risking event for the project. As governments and industry work to secure critical mineral supply chains, positioning Hecla-Kilmer as a leading candidate for near-term development in North America."

Mineral	Typical Leaching Method	Temperature	Recovery Profile
Apatite (Hecla-Kilmer)	Mild acid digestion (36% HCI)	50°C	97-99% of REEs leached to solution, with an ~75% TREO Recovery from beneficiation
Monazite	Sulfuric acid bake (93-98%)	200-600+°C	~80-90% REE recovery after water leach (variable)
Bastnasite	Acid roasting + water leach or flotation	150-500°C	60-80% REE recovery (variable)

Table 2 showing typical leach methods on conventional rare earth deposits

Methodology and Quality Assurance

A master composite, weighing approximately 200 kg, was prepared from the assay pulps of hole HK22-013 by SGS. It was homogenized, stage crushed to minus 10 mesh, and split into test charges.

Head grade, batch, and concentrate products were determined via lithium-borate fusion of a 0.5 gram sample analyzed via Wavelength Dispersion X-ray Fluorescence (WD-XRF). The remaining rare earth elements for the head sample were determined via 0.5 gram sodium-peroxide fusion multi-element ICP-MS.

The SGS analysis included a quality assurance / quality control (QA/QC) program including the insertion of rare earth element standards and blank samples. Neotech detected no significant QA/QC issues during review of the data. Neotech is not aware of any drilling, sampling, recovery or other factors that could materially affect the accuracy or reliability of the data referred to herein. SGS Minerals Lakefield is an ISO/IEC 17025 and ISO9001:2015 accredited. SGS is independent of Neotech.

*TREO (Total Rare-Earth Oxides) has been used to express the results in the press release. TREO is calculated by converting the elemental ppm to Rare-Earth Oxides using a conversion factor and is the summation of $CeO_2 + La_2O_3 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3 + Y_2O_3$.

**PMREO (Permanent Magnet Rare-Earth Oxides) has been used to express the results in the press release. PMREO is calculated by converting the elemental ppm to Rare-Earth Oxides using a conversion factor and is the summation of $Pr_6O_{11} + Nd_2O_3 + Tb_4O_7 + Dy_2O_3$

About Neotech Metals

Neotech Metals Corp. is a mineral exploration company dedicated to discovering and developing valuable mineral resources within promising jurisdictions around the world. With a strong commitment to environmental stewardship and sustainable practices, Neotech is positioned to make a positive impact while maximizing the potential of its exploration properties.

The company has a diversified portfolio of Rare-Earth Element and Rare Metals projects, including Hecla-Kilmer, located 20 km from the Otter Rapids 180MW hydroelectric power generation station and active Ontario Northway railway, along with its TREO and Foothills projects located in British Columbia. All three projects are 100% wholly-owned.

Qualified Person

Technical Information for this news release has been prepared in accordance with the Canadian regulatory requirements set out in National Instrument 43-101. Jared Galenzoski VP Exploration, P.Geo., and Qualified Person, has reviewed and approved all of the data and statements made for this news release.

Contact Information

Reagan Glazier, CEO and Director reagan@neotechmetals.com +1 403-815-6663

ON BEHALF OF THE BOARD

Reagan Glazier, Chief Executive Officer and Director

Neotech Metals Corp.

Forward-Looking Statements

Certain information contained herein constitutes "forward-looking information" or "forward-looking statements" under Canadian securities legislation. Forward-looking information typically relates to future events or the future performance of the Company and is often identified by words such as "will," "expects," "intends," "plans," "estimates," "anticipates," or similar expressions, and includes statements related to metallurgical testing and results, exploration activities, project development potential, and the technical, financial, and business prospects of Neotech Metals Corp. and its properties.

Forward-looking statements are based on the opinions and estimates of management as of the date such statements are made, and are subject to a variety of known and unknown risks, uncertainties, and other factors that could cause actual events, results, or performance to differ materially from those anticipated in such forward-looking statements. These factors include, but are not limited to: the receipt of necessary regulatory approvals and permits; metallurgical, exploration, and economic results not meeting expectations; risks related to the interpretation of data; fluctuations in commodity prices; availability of capital and financing on acceptable terms; risks inherent in mineral exploration and development; delays or failures in equipment, services, or third-party contractors; changes in laws or regulations; environmental and permitting risks; and risks related to maintaining social licence, including relationships with local communities and Indigenous groups.

Specific to metallurgical testing, forward-looking statements may include assumptions regarding the scalability of test results, the ability to replicate laboratory outcomes under commercial conditions, and the economic viability of processing methods based on current or projected recoveries. There is no guarantee that the metallurgical results achieved in preliminary testing will be repeated in future phases of study or commercial development.

While management believes the assumptions and expectations reflected in such forward-looking statements are reasonable, they are inherently subject to significant business, technical, economic, and regulatory uncertainties. Accordingly, readers should not place undue reliance on forward-looking information. Neotech disclaims any obligation to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise, except as required by applicable securities laws.

The CSE has not reviewed, approved, or disapproved the contents of this press release.



To view the source version of this press release, please visit https://www.newsfilecorp.com/release/246769