

EV Nickel Reports Strong Pilot-Scale Bioleach Results With Over 90% Nickel Extraction And Successful Nickel Sulphate Production

03.02.2026 | [ACCESS Newswire](#)

- 90.1% Ni and 89.6% Co extraction achieved at day six
- Pilot circuit operated continuously for 11 days, followed by 5 days of batch operation
- >99% recovery of Ni and Co as a mixed hydroxide precipitate ("MHP") from pregnant leach solution
- Successful precipitated Nickel sulphate ($\text{NiSO}_4 \cdot 6\text{H}_2\text{O}$) with a purity of up to 98.2%
- Effective iron removal (>99%) with minimal nickel and cobalt losses
- Magnesium recovered as a saleable by-product

TORONTO, February 3, 2026 - [EV Nickel Inc.](#) (TSX-V:EVNI) ("EVNi" or the "Company") is pleased to announce positive results from a continuous pilot-scale bioleaching and downstream metals recovery test program conducted on flotation concentrates from its W4 Nickel Project near Timmins, Ontario (see press releases dated May 2, 2023 and September 26, 2023).

Bioleaching is a processing technology that eliminates the need for expensive smelters, roasters, autoclaves, and acid plants required for other processing operations. This significantly reduces upfront capital costs and lowers operating expenses by avoiding high energy consumption, maintenance, and complex materials handling. Traditional processing requires shipping concentrate long distances to third-party facilities whereas, bioleaching can be performed on site, reducing transportation costs and allows producers to retain the smelting margin rather than paying treatment and refining charges.

Bioleaching uses naturally occurring bacteria to extract nickel at ambient temperatures and pressures, producing substantially lower greenhouse gas emissions than the current energy-intensive alternatives avoiding sulfur dioxide emissions, slag generation, and the high acid consumption.

Bioleaching produces intermediate products such as nickel sulphate and nickel MHP suitable for conversion into battery-grade materials and creates a more direct and transparent pathway to electric vehicle battery manufacturers. EVNi's advances in nickel bioleaching are now demonstrating scalability and reliability, positioning it as a compelling alternative for future nickel projects.

"After more than four years of development and testing, the results being reported today demonstrate that EV Nickel is ready to advance towards a full-scale bioleaching facility at the W4 Project," said Paul Davis, Vice President Exploration. "In addition, the Company is now positioned to work with other project owners to advance bioleaching solutions across the nickel sector."

The batch, semi-continuous and bioleaching pilot programs, completed by RPC Metallurgical Services in collaboration with EPCM Services Ltd. Located in Fredericton, New Brunswick and Oakville, Ontario, respectively, successfully validated the Company's flotation-bioleach processing flowsheet and demonstrated high nickel ("Ni") and cobalt ("Co") extractions under continuous operating conditions. In addition, downstream process

In batch and semi-continuous bioleaching testing, Ni extraction of up to 98.9% and Co extraction of up to 98.8% was achieved. The Ni and Co extraction were nearly complete within four days under semi-continuous

conditions at low solids density with successful large-batch bioleach tests at 5% and 10% solids, achieving ~95% nickel extraction within 10 days. Results indicate that the process is amenable to 15-20% solids density with estimated continuous retention times of 4-6 days, supporting future scale-up. Bench-scale optimization demonstrated that nutrient requirements can be reduced to 25% of baseline levels without materially impacting bioleach performance. Indigenous bacterial cultures were successfully scaled up from laboratory volumes to 600 litres, confirming their suitability for larger-scale bioleach operations.

The pilot program utilized blended flotation concentrates grading approximately 6.4% nickel tested in the bioleach reactors demonstrating robust bacterial activity and confirm the technical viability of scaling the bioleach process to commercial operations. The Pilot circuit operated continuously for 11 days, followed by 5 days of batch operation resulting in 90.1% Ni and 89.6% Co extraction at day six of the pilot program displaying a significantly lower acid consumption than reported for other hydrometallurgical extraction processes.

Comprehensive metals recovery testing was completed on the bioleach pregnant leach solution, including staged precipitation of iron, copper, nickel, cobalt, and magnesium. Results of the metal recovery testing include >99% recovery of Ni and Co as a mixed hydroxide precipitate ("MHP"), >99% iron removal with minimal Ni and Co losses and successful precipitation and recovery of magnesium as a saleable by-product. Subsequent process development work demonstrated that the MHP product can be further refined into battery-grade nickel sulphate ($\text{NiSO}_4 \cdot 6\text{H}_2\text{O}$) with a purity of up to 98.2%. Nickel not captured in the nickel sulphate is not lost and is recycled back into the MHP circuit for future recovery.

development work confirmed the ability to produce high-purity nickel sulphate suitable for battery supply chains.

"The successful completion of this continuous pilot program is a major technical milestone for EV Nickel," said Paul Davis, Vice President of Exploration. "Achieving over 90% Ni extraction while also demonstrating a clear pathway to high-purity nickel sulphate reinforces the strategic value of our Shaw Dome project and its potential to supply responsibly produced nickel into the electric vehicle market."

The program findings support the technical viability of EVNi's flotation-bioleach flowsheet and reinforce the potential for a low-carbon, environmentally responsible processing route capable of producing battery-relevant Ni and Co products while recovering magnesium as a potential by-product. Preliminary design criteria were developed for a bioleach circuit based on processing 800 tonnes per day of W4 nickel ore, providing a foundation for future engineering and economic studies.

Based on the encouraging pilot results, the Company plans to continue optimization work focused on improving oxygen transfer efficiency, increasing pulp density, and further refining the nickel sulphate crystallization process. These enhancements are expected to improve recoveries and reduce capital intensity ahead of future development studies.

About EV Nickel Inc.

EV Nickel's mission is to provide the world with clean nickel from Tier 1 jurisdictions. Our projects are located within 30 km of Timmins, a developing hub of clean critical minerals for the North American battery and stainless-steel markets, as well as an important emerging critical mineral district for North American efforts to bring on-shore the full vertical integration of electric batteries and vehicles.

EV Nickel aims to play an integral part of the North American on-shoring initiative as the Company's clean, low carbon deposits can be an important source of supply to support the Inflation Reduction Act (IRA) and Ontario and Federal policies and initiatives which strive to bring clean critical mineral production from Canada into the North American supply chain and globally.

In further support of this initiative, the Company has and will continue to partner with environmentally responsible and ethical organizations from around the province and around the world to assist in developing these essential critical minerals. EV Nickel is also eager to collaborate with all stakeholders and leading sustainable engineering, mining, automotive and battery companies to provide this key input to support global decarbonization initiatives. The governments of Ontario and Canada are also providing significant

legislative, policy and financial support to help ensure that the Timmins region becomes a leading participant in the developing North American supply chain for the clean energy transition.

Qualified Person

The Company's Projects are under the direct technical supervision of Paul Davis, P.Geo., and Vice-President of the Company. Mr. Davis is a Qualified Person as defined by NI 43-101. He has reviewed and approved the technical information in this press release. There are no known factors that could materially affect the reliability of the information verified by Mr. Davis.

Cautionary Note Regarding Forward-Looking Statements:

This press release contains forward-looking information. Such forward-looking statements or information are provided for the purpose of providing information about management's current expectations and plans relating to the future. Readers are cautioned that reliance on such information may not be appropriate for other purposes. Any such forward-looking information may be identified by words such as "anticipate", "proposed", "estimates", "would", "expects", "intends", "plans", "may", "will", and similar expressions. Forward-looking statements or information are based on a number of factors and assumptions which have been used to develop such statements and information, but which may prove to be incorrect. Although EVNi believes that the expectations reflected in such forward-looking statements or information are reasonable, undue reliance should not be placed on forward-looking statements because the Company can give no assurance that such expectations will prove to be correct. Factors that could cause actual results to differ materially from those described in such forward-looking information include, but are not limited to, changes in business plans and strategies, market conditions, share price, best use of available cash, the ability of the Company to raise sufficient capital to fund its obligations under various contractual arrangements, to maintain its mineral tenures and concessions in good standing, and to explore and develop its projects and for general working capital purposes, changes in economic conditions or financial markets, the inherent hazards associated with mineral exploration, future prices of metals and other commodities, environmental challenges and risks, the Company's ability to obtain the necessary permits and consents required to explore, drill and develop its projects and if obtained, to obtain such permits and consents in a timely fashion relative to the Company's plans and business objectives, changes in environmental and other laws or regulations that could have an impact on the Company's operations, compliance with such laws and regulations, dependence on key management personnel, and general competition in the mining industry. These risks, as well as others, could cause actual results and events to vary significantly. The forward-looking information in this press release reflects the current expectations, assumptions and/or beliefs of EVNi based on information currently available to the Company. Any forward-looking information speaks only as of the date on which it is made and, except as may be required by applicable securities laws, the Company disclaims any intent or obligation to update any forward-looking information, whether as a result of new information, future events or results or expressly qualified by this cautionary statement.

The securities offered have not been registered under the U.S. Securities Act of 1933, as amended (the "U.S. Securities Act"), or any applicable state securities laws and may not be offered or sold to, or for the account or benefit of, persons in the United States or "U.S. persons," as such term is defined in Regulation S promulgated under the U.S. Securities Act, absent registration or an exemption from such registration requirements. This press release shall not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the securities in any jurisdiction in which such offer, solicitation or sale would be unlawful.

Contact Information

For further information, visit www.evnickel.com

Or contact: Paul Davis
E-mail: info@evnickel.com

EV Nickel Inc.
200 - 150 King St. W
Toronto, ON M5H 1J9
www.evnickel.com

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy of this release.

SOURCE: EV Nickel Inc.

View the original press release on ACCESS Newswire

Dieser Artikel stammt von Rohstoff-Welt.de

Die URL für diesen Artikel lautet:

<https://www.rohstoff-welt.de/news/720994--EV-Nickel-Reports-Strong-Pilot-Scale-Bioleach-Results-With-Over-90Prozent-Nickel-Extraction-And-Successful-Ni>

Für den Inhalt des Beitrages ist allein der Autor verantwortlich bzw. die aufgeführte Quelle. Bild- oder Filmrechte liegen beim Autor/Quelle bzw. bei der vom ihm benannten Quelle. Bei Übersetzungen können Fehler nicht ausgeschlossen werden. Der vertretene Standpunkt eines Autors spiegelt generell nicht die Meinung des Webseiten-Betreibers wieder. Mittels der Veröffentlichung will dieser lediglich ein pluralistisches Meinungsbild darstellen. Direkte oder indirekte Aussagen in einem Beitrag stellen keinerlei Aufforderung zum Kauf-/Verkauf von Wertpapieren dar. Wir wehren uns gegen jede Form von Hass, Diskriminierung und Verletzung der Menschenwürde. Beachten Sie bitte auch unsere [AGB/Disclaimer!](#)

Die Reproduktion, Modifikation oder Verwendung der Inhalte ganz oder teilweise ohne schriftliche Genehmigung ist untersagt!
Alle Angaben ohne Gewähr! Copyright © by Rohstoff-Welt.de -1999-2026. Es gelten unsere [AGB](#) und [Datenschutzrichtlinen](#).