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

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- 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 (NiSO?·6H?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 ($NiSO_4 \cdot 6H_2O$) 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.

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