

December 12, 2024

TSX-V: EVNI

# EV NICKEL ANNOUNCES POSITIVE MINERALOGICAL RESULTS FOR NEW LARGE-SCALE ZONE

- QEMSCAN analysis completed on new large-scale zone ("CarLang C" or "Gemini Zone") as follow-up to recent drill results
- Results indicate presence of magmatic sulfides
- New and distinct large-scale zone that contains potential for higher recovery rates and higher quality concentrate

**TORONTO, ON – EV NICKEL INC.** (TSX-V: EVNI) ("EVNi" or the "Company") is excited to announce the results of Quantitative Evaluation of Materials by Scanning Electron Microscope ("QEMSCAN") and Electron Probe Microanalysis ("EPMA") completed by XPS Sudbury, on selected samples from drill hole EV24-CAR08 located in the CarLang C target area.

Following the encouraging higher-grade intercepts from diamond drill hole EV24-CAR08, announced in our October 8, and Nov 5, 2024 press releases, these QEMSCAN results confirm that the higher grade drill results are associated with nickel sulphides observed in the drill core with mineralization that could be associated with improved recovery rates and result in a higher-grade concentrate output.

The Company is now turning its focus to this new zone as its top priority in the 2025 exploration program and is renaming the zone the Gemini North Zone.

According to Paul Davis, VP, Exploration, "These QEMSCAN results, when combined with the grade results from our recent drilling program, make the Gemini North Zone a new mineralized zone that appears to be associated with magmatic sulphides, similar to Mt. Keith in Western Australia, in the Timmins area. Based upon the dominance of millerite and heazlewoodite, I would be surprised if we did not see higher recovery rates and a higher grade nickel concentrate from the Gemini North Zone. Surface samples from outcrop to the west of the drill hole and an overburden depth of less than 15 metres in EV24-CAR08, indicates that the hosting units are near surface for this new zone. We are very excited about the future potential of this new discovery and are designing our 2025 Exploration Program to flesh out the overall size of the mineralized system."

## **Technical Details.**

QEMSCAN mineralogical analysis of selected samples throughout hole EV24-CAR08 indicate millerite and heazlewoodite as being the dominant nickel minerals averaging 0.69% and 0.10% by mass, respectively (Table 1). The presence of a significantly higher proportion of nickel sulphide minerals in drill hole EV24-CAR08 could potentially indicate that expected recoveries from this style of mineralization would be higher than for other large-scale peridotite hosted nickel zones in the Timmins area. EPMA analysis completed on the millerite and heazlewoodite measured average nickel contents of 63.97% Ni and 72.38% Ni, respectively. Selected samples have been submitted to Corem in Quebec City for preliminary flotation test work to determine the recovery characteristics of the sulphide zone.

Table 1: QEMSCAN	able 1: QEMSCAN Modal Mineralogy (mass%)												
Drill Hole ID	Sample ID	From	То	Length	Millerite	Heazlewoodite	Pentlandite	Ni-Fe Alloy	Chalcopyrite	Brucite			
		(m)	(m)	(m)	(%)	(%)	(%)	(%)	(%)	(%)			
EV24-CAR08	C924830	100.5	102	1.5	0.40	0.06	0.02	0.01	0.09	4.16			
EV24-CAR08	C924890	150.5	151	0.5	0.77	0.11	0.02	0.00	0.16	5.57			
EV24-CAR08	C924833	160.5	162	1.5	0.74	0.10	0.03	0.00	0.15	4.38			
EV24-CAR08	C924774	165	166.5	1.5	1.16	0.14	0.01	0.02	0.15	2.40			
EV24-CAR08	C924820	243	244.5	1.5	0.39	0.08	0.00	0.01	0.40	1.50			

Chalcopyrite is interpreted as being the dominant copper mineral and the confirmation of an average of 0.19% chalcopyrite by mass increases the Company's confidence in the magmatic nature of the sulphide mineralization. An average of 3.6% of the samples mass were comprised of Brucite, the most reactive carbon storage mineral indicating that the Gemini Zone has the potential to be a host for long term carbon sequestration. Additional work would need to be completed by the Company to confirm the volumes of carbon that could be captured by the host peridotites.

Table 2: 2024 Drill Program - EV24-CAR08 -Location and Depth											
Drill Hole	UTM Easting	UTM Northing	Elevation	Dip	Azimuth	Depth					
	(mE)	(mN)	(m)	(°)	(°)	(m)					
EV24-CAR08	498645	5359645	306.1	-60	235	252					

EVNI is currently developing its 2025 exploration program for the Gemini North Zone and CarLang C area and expects to complete diamond drilling, geophysical analysis, metallurgical and mineralogical studies with an objective of defining a new resource covering the nickel mineralization identified in the 2024 exploration program.

## Core Handling and Assay-QA/QC Procedures

Drill core samples from EVNi drilling at the CarLang C Target were cut and bagged at the core logging facility located near the Shaw Dome Project and transported to Activation Laboratories Limited ("Actlabs") in Timmins for preparation and analysis. Samples, along with certified standards and blanks, that are included by the Company for quality assurance and quality control, were prepared and analyzed at the laboratories. At Actlabs, samples are crushed to 80% passing 2mm. A riffle split is pulverized to 95% passing 105 microns. Nickel, copper, cobalt, iron and sulphur are analyzed by peroxide fusion with an ICP-OES finish and gold, platinum and palladium are analyzed by Fire Assay with an ICP-OES finish. These and future assay results may vary from time to time due to re–analysis for guality assurance and guality control.

## 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 and an important emerging critical mineral district for the 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 transition energy.

#### **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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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 forwardlooking 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

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## **Contact Information**

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