

Quantum Critical Metals' Marcy Kiesman on Using AI to Advance Critical Minerals Exploration in Canada

written by Tracy Hughes | October 9, 2025

October 9, 2025 – In an era when artificial intelligence is reshaping nearly every industry, [Quantum Critical Metals Corp.](#) (TSXV: LEAP | OTCQB: ATOXF) is taking a bold step to merge machine learning with mineral exploration. “Everything is getting automated—faster, better, smarter,” said CEO and Director **Marcy Kiesman**. “We’re trying to use AI in every aspect we can in the mining field.” From mapping mineralized zones to correlating geological data, the company’s technology-first approach is designed to accelerate discoveries of key critical minerals essential to the energy transition.

At the heart of this strategy is **Quantum’s NMX East Project** in the James Bay region of Québec—home to a suite of priority metals that includes gallium, lithium, niobium, rubidium, and tantalum. “We’ve just recently flown two airborne surveys on our NMX East project,” Kiesman said. “The anomaly we detected is similar in amplitude, strike, shape, and size to that of our neighboring Nisk deposit owned by [Power Metallic Mines Inc.](#) (TSXV: PNP | OTCQB: PPNF)—which is fantastic news for Quantum and its shareholders.” The project sits just ten kilometers outside of Namaska and adjacent to Nemaska Lithium’s Wabouchi deposit, placing Quantum squarely within one of Canada’s most active critical minerals corridors.

The company’s **October 2025 [update](#)** confirmed the completion of a second MAG-TDEM airborne survey, revealing deep bedrock

conductors consistent with nickel-PGE mineralization. “It’s encouraging for shareholders,” Kiesman said at the time, “that a magnetic anomaly on the NMX East Property is similar in amplitude, strike, shape, and size to the anomaly found at the neighboring Nisk deposit.” Drill permits are now being prepared, and the next phase will target both the pegmatite zones and a newly identified ultramafic package at the southern end of the property.

Quantum’s exploration philosophy extends beyond conventional geology. “We upload most of our reports into AI systems to find correlations between our projects and neighboring projects,” Kiesman explained. “We also use AI to differentiate the different rock types on the project and to statistically locate the areas of greatest interest—to make our exploration faster on the ground.” Metallurgical work is currently underway to determine the most efficient method for extracting critical minerals from mica—the key mineral carrier at NMX East. “The areas of the rock with high mica concentrations also had high gallium—around 186 grams per tonne gallium, compared to 40 grams per tonne when averaged with the rest of the rock,” she said. “We’re honing in on these micas.”

Beyond Québec, Quantum is advancing the Victory Antimony Project and other copper and silver assets in northern British Columbia, with assay results pending from recent grab samples. The company also [joined](#) the 47G Institute, a U.S.-based aerospace and defense innovation network, as part of its strategic outreach to supply the Pentagon and allied industries with non-Chinese sources of critical minerals. “They have turned out to be amazing contacts for Quantum,” Kiesman said. “The U.S. has put in place a timeline of 2027 to ban Chinese products, so they are actively searching for other sources of these materials. Luckily, we have some of these materials.” As the company deepens its work across its expanding portfolio—including the

NMX East Gallium-Rubidium-Cesium Project, the Discovery polymetallic project, and the newly acquired Prophecy Germanium-Gallium-Zinc Project—Quantum Critical Metals is positioning itself at the intersection of technology, exploration, and national strategy. “We really want to start drilling more of our pegmatites and ultramafic package,” Kiesman said. “We’ll likely do the drill program for everything all at once to make it more efficient.”

To access the complete interview, [click here](#)

Don’t miss other InvestorNews interviews. Subscribe to the InvestorNews YouTube channel by [clicking here](#)

About Quantum Critical Metals Corp.

Quantum Critical Metals Corp. (TSX.V: LEAP) (OTCQB: ATOXF) (FSE: 86A1) is a Canadian mineral exploration company focused on advancing critical metals projects that power next-generation technologies. With a growing portfolio of promising assets—including the NMX East Gallium-Rubidium-Cesium Project in Québec, the Discovery Gallium-Rubidium-Cesium and polymetallic project in Québec, the Victory Antimony Project in British Columbia, and the newly acquired Prophecy Germanium-Gallium-Zinc Project in British Columbia, among others, the Company is strategically positioned to support the West’s transition to a secure and sustainable critical metals supply.

To learn more about Quantum Critical Metals Corp., [click here](#)

Disclaimer: Quantum Critical Metals Corp. is an advertorial member of InvestorNews Inc.

This interview, which was produced by InvestorNews Inc. (“InvestorNews”), does not contain, nor does it purport to contain, a summary of all material information concerning the

Company, including important disclosure and risk factors associated with the Company, its business and an investment in its securities. InvestorNews offers no representations or warranties that any of the information contained in this interview is accurate or complete.

This interview and any transcriptions or reproductions thereof (collectively, this "presentation") does not constitute, or form part of, any offer or invitation to sell or issue, or any solicitation of any offer to subscribe for or purchase any securities in the Company. The information in this presentation is provided for informational purposes only and may be subject to updating, completion or revision, and except as may be required by applicable securities laws, the Company disclaims any intent or obligation to update any information herein. This presentation may contain "forward-looking statements" within the meaning of applicable Canadian securities legislation. Forward-looking statements are based on the opinions and assumptions of the management of the Company as of the date made. They are inherently susceptible to uncertainty and other factors that could cause actual events/results to differ materially from these forward-looking statements. Additional risks and uncertainties, including those that the Company does not know about now or that it currently deems immaterial, may also adversely affect the Company's business or any investment therein.

Any projections given are principally intended for use as objectives and are not intended, and should not be taken, as assurances that the projected results will be obtained by the Company. The assumptions used may not prove to be accurate and a potential decline in the Company's financial condition or results of operations may negatively impact the value of its securities. This presentation should not be considered as the giving of investment advice by the Company or any of its

directors, officers, agents, employees or advisors. Each person to whom this presentation is made available must make its own independent assessment of the Company after making such investigations and taking such advice as may be deemed necessary. Prospective investors are urged to review the Company's profile on SedarPlus.ca and to carry out independent investigations in order to determine their interest in investing in the Company.