Battery X Metals Inc. Completes Preliminary AI-Powered Prospectivity Modelling

01.11.2025 | ACCESS Newswire

Identifies Multiple Prospective Zones Highlighting Geological Patterns Consistent with Known Lithium Mineralization, and Initiates Secondary Modelling to Refine AI-Generated Targets for Critical Battery Metals in Nevada, USA

***News Release Highlights*:**

1. Battery X Discoveries, a wholly-owned subsidiary of Battery X Metals, in partnership with TerraDX, has successfully completed the preliminary AI-powered prospectivity modelling of its Nevada exploration initiative, conducted in collaboration with TerraDX.
2. The analysis, powered by TerraDX's proprietary artificial intelligence system and informed by 60 curated geological datasets - including those from regions of known lithium mineralization - has identified multiple new prospective zones in Nevada. These zones were flagged by the AI model for exhibiting key data attributes and correlations consistent with those in the training datasets.
3. With these preliminary results in place, the project is now advancing into secondary phase focused on exclusion mapping. This stage aims to narrow broader regions into high-confidence, AI-derived exploration targets by enhancing predictive accuracy and systematically excluding non-viable areas such as protected lands and population centers.

Battery X Metals Inc. (CSE:BATX) (OTCQB:BATXF) (FSE:5YW, WKN:A40X9W) ("Battery X Metals" or the "Company") an energy transition resource exploration and technology company, announces that, further to its news releases dated April 25, 2025 and August 1, 2025, whereby it disclosed that its wholly-owned subsidiary, Battery X Discoveries Inc. ("Battery X Discoveries") entered into a binding memorandum of understanding (MOU) with TerraDX Discoveries Inc. ("TerraDX") and MineMind Metals Inc. ("MineMind Metals") to establish a strategic joint venture framework for the collaborative exploration of critical battery metals, including lithium, cobalt, graphite, and other battery metal targets in the state of Nevada, USA through the application of artificial intelligence (AI)-powered mineral targeting models, and building on the completion of the foundational data preparation and processing phase announced on August 1, 2025, the preliminary prospectivity modelling of the initiative has now been completed, with initial results identifying several regions highlighting geological patterns consistent with known lithium mineralization. This early analysis not only showcase the AI mode's ability to recognize meaningful geological correlations but also highlight its potential to accelerate exploration targeting across Nevada.

The preliminary AI modelling utilized approximately 60 curated datasets drawn from public sources and internally generated datasets, which were processed through TerraDX's proprietary AI models to generate preliminary probability models highlighting geological patterns consistent with known lithium mineralization. The prospectivity analysis utilized publicly available national and state-level datasets from the U.S. Geological Survey (USGS) and the Nevada Bureau of Mines and Geology (NBMG). These included mineral occurrence and deposit databases, geochemical compilations, geophysical survey data, and geologic mapping products. The AI model correlated these datasets with regions of known lithium mineralization to identify areas exhibiting comparable data patterns within the analyzed inputs.

This analysis represents an important milestone in the development of the initiative, as they confirm the AI system's capacity to identify subtle correlations and complex geological relationships that may be overlooked by traditional exploration methods.

The project will now advance into the second phase of the modelling, which will include additional training runs to sharpen predictive accuracy, exclusion mapping to systematically filter out unviable exploration zones such as population centers, national parks, and restricted-use lands, refining the phase I prospectivity zones into high-confidence, AI-derived exploration targets. These refined targets are expected to guide the assessment of potential claim or project acquisition opportunities in Nevada.

Battery X Metals' Comprehensive 360° Strategy Across the Battery Metals Value Chain
This initiative continues to build on the Company's strategic partnership with TerraDX and MineMind Metals

which forms a key pillar of Battery X Metals' comprehensive 360° strategy across the battery metals value chain. This strategy includes the exploration of prospective domestic properties through AI targeting, the development of proprietary recovery technologies to extract battery-grade materials from end-of-life batteries in collaboration with a globally ranked top 20 university[1], and the extension of electric vehicle battery lifespan through the Company's wholly-owned subsidiaries, Battery X Rebalancing Technologies Inc., patent-pending rebalancing software and hardware machine.

"The identification of regions with geochemical similarities to known lithium-mineralization regions is a strong validation of our AI-powered exploration approach," said Massimo Bellini Bressi, CEO of Battery X Metals. "These early results strengthen our confidence as we move into the next phase of modelling and exclusion mapping, where we expect to refine these zones into high-confidence targets for field validation."

The Company intends to provide a further update upon completion of the secondary modelling phase.

Nevada's Strategic Role in Advancing U.S. Battery Metal Supply Chain Independence
Nevada is one of the most resource-rich jurisdictions in the United States for critical battery metals, particularly lithium. The state is estimated to hold approximately 85% of the nation's known lithium deposits, largely due to the state's arid environment and closed basin hydrologic systems which have combined over millions of years to deposit vast amounts of the mineral deemed critical to the clean energy movement.[2]

According to the U.S. Geological Survey (USGS), commercial-scale lithium production in the United States in 2023 came solely from a continental brine operation in Nevada[3] - the Silver Peak facility operated by Albemarle Corporation. This made Nevada the sole domestic producer of lithium that year. Nevada is also home to Thacker Pass, located within the McDermitt Caldera in Humboldt County. It is recognized as the largest measured lithium reserve and resource in the world. [4]

These developments align with federal policy initiatives to secure critical mineral supply chains. The Defense Production Act has been invoked to accelerate domestic lithium production and reduce reliance on foreign sources.[5]

Nevada offers a stable foundation for AI-driven exploration. This strategic agreement with TerraDX and MineMind Metals reinforces Battery X Metals' integrated 360° strategy across the battery metals value chain and aims to position the Company to support U.S. clean energy and electrification goals.

1 The initial research and collaboration agreement concluded on June 30, 2025. the Company is evaluating a new agreement with the globally ranked top 20 university to continue and expand its prior development work, 2 Nevada Independent, 3 USGS Mineral Commodity Summaries 2025 - Lithium, 4 LAC, 5 U.S. Department of Defense - DPA Awards?

About Battery X Metals Inc.
Battery X Metals (CSE:BATX)(OTCQB:BATXF)(FSE:5YW, WKN:A40X9W) is an energy transition resource exploration and technology company committed to advancing domestic battery and critical metal resource exploration and developing next-generation proprietary technologies. Taking a diversified, 360° approach to the battery metals industry, the Company focuses on exploration, lifespan extension, and recycling of lithium-ion batteries and battery materials. For more information, visit batteryxmetals.com.

On Behalf of the Board of Directors
Massimo Bellini Bressi, Director

For further information, please contact:
Massimo Bellini Bressi
Chief Executive Officer
Email: mbellini@batteryxmetals.com
Tel: (604) 741-0444

Disclaimer for Forward-Looking Information
This news release contains forward-looking statements within the meaning of applicable securities laws. Forward-looking statements in this release relate to, among other things, the Company's objectives,

strategies, and future plans with respect to AI-assisted exploration, strategic partnerships, and the advancement of its 360° battery metals strategy. Specific forward-looking statements include, but are not limited to: statements regarding the anticipated outcomes and potential benefits of the preliminary and secondary modelling phases of the Nevada initiative; the performance and expected capabilities of TerraDX's proprietary AI system; the refinement of modelling outputs through exclusion mapping; the assessment of potential claim or project acquisition opportunities; the establishment, continuation, or execution of joint venture arrangements with TerraDX and MineMind Metals; the timing of further updates regarding modelling, exploration progress, and related strategic developments; and the Company's broader plans to advance exploration, materials recovery, and battery lifespan extension technologies as part of its integrated battery metals strategy. These forward-looking statements are based on management's current expectations, estimates, assumptions, and projections that are believed to be reasonable as of the date of this release. However, such statements are inherently subject to known and unknown risks, uncertainties, and other factors that may cause actual results, performance, or achievements to differ materially from those expressed or implied. These factors include, but are not limited to: the accuracy, quality, and availability of datasets used in the AI modelling; the reliability, interpretation, and applicability of AI-generated outputs; the timing, cost, and feasibility of the secondary modelling phase; the Company's ability to secure or evaluate potential exploration opportunities; the negotiation or continuation of joint venture arrangements; access to financing; regulatory, environmental, or permitting considerations in Nevada or other jurisdictions; commodity price fluctuations; and general industry, market, or geopolitical developments. Forward-looking statements reflect management's beliefs and expectations only as of the date hereof and are not guarantees of future performance. There can be no assurance that the AI prospectivity modelling will identify economic mineral deposits or that any regions identified will lead to exploration or development activities. The Company undertakes no obligation to update or revise any forward-looking information, whether as a result of new information, future events, or otherwise, except as required by applicable law. Readers are cautioned not to place undue reliance on forward-looking statements and are encouraged to review the Company's continuous disclosure filings available at www.sedarplus.ca for additional risk factors and further information.

SOURCE: Battery X Metals