Infinitum to Use AI at Hot Breccia Copper Project in Arizona

04.03.2024 | ACCESS Newswire

VANCOUVER, March 4, 2024 - Infinitum Copper Corp. (TSXV:INFI)(OTCQB:INUMF) ("Infinitum" or the "Company") is pleased to announce that project operator Prismo Metals Inc. (CSE:PRIZ,)(OTCQB:PMOMF) ("Prismo") has engagement ExploreTech Inc. from California to apply xFlare, their Artificial Intelligence (AI)-Optimized drill planning solution, at its Hot Breccia Project where a number of features suggests the potential for a well mineralized Arizona-style Copper Porphyry at depth.

The xFlare AI approach is specifically designed to combine surface geology and drilling results with computationally intensive remodeling of existing geophysical datasets to optimize targeting of covered targets. The process quickly generates thousands of solutions that cluster on the best fits between the geological and geophysical data and then generates drillhole trajectories designed to cut those clusters most effectively.

Figure 1. Location of the Hot Breccia copper project

"Hot Breccia has all the right elements for significant porphyry copper and skarn mineralization, and we are thrilled to be partnering with the Company to optimize their drilling," said Alex Miultenberger, ExploreTech's founder and CEO Alex Miltenberger. "The Hot Breccia ZTEM anomaly is very strong, and xFlare was designed precisely to refine these kinds of data to match what is known of the geology and the target model."

The ZTEM survey identified a large conductive body at depth below the surface exposure of a large dike swarm that hosts the namesake breccias. Anomalous copper and gold assays are locally present at the surface in this area (see Prismo Metals press release of July 11, 2023), and high-grade copper and zinc assays are present above this anomaly in historic drill holes completed by major copper producers in the 1970's and early 1980's (see Prismo Metals press release of January 29, 2023).

While all of the historic drill holes intersected hydrothermal alteration within the volcanic rocks that overlie the typically better mineralized Paleozoic carbonate rocks with increasing alteration intensity downwards, no historic drilling targeted this newly identified conductive zone identified in the ZTEM survey. The carbonate host units above the anomaly have several copper intercepts reported to exceed 1% copper and elevated zinc levels.

Figure 2. View of the subsurface looking northeasterly showing the conductive body from the ZTEM survey and cross sections of the Christmas deposit and the Hot Breccia area. Historic drill holes are shown with copper assays as disks within the red ellipse; the magenta color indicates > 1% Copper.

Figure 3. Plan view of the surface geology showing the hot breccia land boundary in black and the cross sections from Fig. 2. The surface projection of the conductive body shown in Fig. 2 is roughly outlined in red.

Assay results from historic drill holes are unverified as the core has been destroyed, but information has been gathered from memos, photos and drill logs that contain some, but not all, of the assay results and descriptions.

1. Qualified Person

Steve Robertson, Chairman of the Company, has acted as the Qualified Person as defined in National Instrument 43-101 for this disclosure and supervised the preparation of the technical information in this release.

2. About Hot Breccia

The Hot Breccia property consists of 1,420 hectares 227 contiguous mining claims located in the world class Arizona Copper Belt. The project lies about four kilometers from the historic Christmas mine which recorded production of about 481.6 million pounds of copper from 20.2 million tons at a grade of 1.2% Copper plus significant gold and silver (Sources: Arizona Geological Society Spring Field Trip Guide in 2014). Infinitum has not been able to verify the Christmas production information and it is not necessarily indicative of the mineralization on the Hot Breccia property.

Infinitum has granted Prismo the option to earn up to a 75% interest in the project from Infinitum Copper Corp. (TSXV: INFI, OTCQB: INUMF) ("Infinitum"), subject to a 2% NSR royalty to a private company, Walnut Mines LLC.

3. About ExploreTech AI

ExploreTech's AI approach to modeling of existing geophysics is specifically designed to augment surface-based geological work to locate anomalies beneath cover (see exploretech.ai for additional information). Their xFlare platform first uses AI to identify and locate where a geophysical anomaly actually lies by calculating thousands of possible explanations (models) for anomalies measured at the surface. This process generates thousands of best-fit models of the combined geology and geophysics, which tend to cluster around the most likely location of the anomaly. It then evaluates the clusters in 3 dimensions to determine the optimal drilling trajectory to pierce as many of the target anomalies as possible. The entire process can be rerun as drill results for specific targets, or additional geophysical surveying, adds new information allowing improved vectoring to the best mineralized parts of a given ore system. This use of AI to reveal and reinforce target anomalies in existing geophysical datasets appears to be a significant new exploration tool and has already been applied in several cases, including imaging a magnetic anomaly at Reyna Silver's Guigui Project.

On Behalf of the Board of Directors of

Infinitum Copper Corp.

Matt Hudson
Chief Executive Officer
matt@infinitumcopper.com

Cautionary Note Regarding Forward-Looking Statements

This press release contains "forward-looking information" within the meaning of Canadian securities legislation. The forward-looking information contained in this press release represents the expectations of the Company as of the date of this press release and, accordingly, is subject to change after such date. - 2 - Forward-looking information is based on, among other things, opinions, assumptions, estimates and analyses that, while considered reasonable by the Company at the date the forward-looking information is provided, are inherently subject to significant risks, uncertainties, contingencies and other factors that may cause actual results and events to be materially different from those expressed or implied by the forward-looking information. The risks, uncertainties, contingencies and other factors that may cause actual results to differ materially from those expressed or implied by the forward-looking information may include, but are not limited to, risks generally associated with the Company's business, as described in the Company's Filing Statement dated February 11, 2022. Readers should not place undue importance on forward-looking information and should not rely upon this information as of any other date. While the Company may elect to, it does not undertake to update this information at any particular time except as required in accordance with applicable laws.

SOURCE: Infinitum Copper

View the original press release on accesswire.com