



Titan Mining Finds Significant Concentrations of Germanium at its Empire State Mine in New York

Discovery of the mineral expands Titan's Empire State Mine into a Growing Critical Metals Complex

Gouverneur, NY – October 20, 2025 – Titan Mining Corporation (TSX: TI; OTCQB: TIMCF) (“Titan” or the “Company”), an existing zinc concentrate producer in upstate New York and an emerging natural flake graphite producer, a key component in the broader rare earths and critical minerals ecosystem, today announced the discovery of significant concentrations of germanium (“Ge”) within existing process streams at its wholly owned Empire State Mine (“ESM”) in St. Lawrence County, New York.

Germanium, a U.S.-designated critical mineral, is essential to semiconductors, fiber optics, night-vision systems, and clean-energy technologies—industries for which the United States relies almost entirely on imports.

Key Highlights

- Germanium identified in existing zinc-processing circuit—no new mining required.
- Initial sampling of the plant feed graded 21 g/t germanium, which was enriched to 77 g/t in the pre-float stream, where the material is more concentrated. The ESM plant has an annual plant feed of 474,000 mt.
- Germanium prices are approximately US\$6,000/kg, with global supply dominated by China.
- Potential to satisfy a substantial portion of U.S. germanium demand through recovery from existing material streams.
- Potential recovery enabled through Titan's existing processing infrastructure, minimizing additional capital requirements.

“Germanium represents an exciting new value driver for Titan and a strategic asset for the United States,” said Rita Adiani, President and CEO of Titan Mining. “Leveraging our existing operations at Empire State Mine allows us to accelerate development at minimal cost while contributing to a stronger, more resilient U.S. critical minerals supply chain.”

Next Steps

- Plant Survey: Titan completed a four-week survey, collecting daily samples from 11 areas of its processing circuit to measure germanium levels. The results will show where germanium is found in the system and guide further testing.
- Test Program: The Company has started focused test work to determine the best and most cost-effective way to recover germanium from existing zinc operations. This includes detailed mineral analysis and trials of different recovery methods to produce a high-grade product or concentrate.
- Resource Consistency: Ongoing sampling is confirming that germanium is consistently present throughout the remaining zinc resource.

About Germanium

Germanium is a rare, silver-gray element essential to defense and advanced-technology systems.



It is used in:

- Infrared optics and thermal-imaging devices for military night-vision, surveillance, and targeting systems.
- Satellite solar cells and high-frequency electronics critical to aerospace and communications.
- Semiconductors and fiber-optic cables used in high-speed computing and secure data networks.

As germanium is a key material in modern warfare and intelligence technologies, the U.S. Department of War classifies it as a critical mineral vital to national security. The United States currently imports nearly all its germanium—with a major share sourced from China and Russia—making Titan's discovery in New York a potential first step toward restoring a secure, domestic supply.

Scientific and Technical Validation

The scientific and technical information in this news release has been reviewed and approved by Mr. Oliver Peters, a Principal Metallurgist and President of Metpro Management Inc., with over 25 years of mineral processing experience. He is a Qualified Person within the meaning of NI 43-101 and is independent of the Company. The initial sampling was based on approximately 5,400 mt of plant feed. Mr. Peters is satisfied that the metallurgical testing procedures and associated assay methods used are standard industry operating procedures and methodologies. He has reviewed, approved and verified the technical information disclosed in this news release, including analytical and test data underlying the technical information.

About Titan Mining Corporation

Titan is an Augusta Group company which produces zinc concentrate at its 100%-owned Empire State Mine located in New York state. Titan is also an emerging natural flake graphite producer and targeting to be the USA's first end to end producer of natural flake graphite in 70 years. Titan's goal is to deliver shareholder value through operational excellence, development and exploration. We have a strong commitment towards developing critical minerals assets which enhance the security of the domestic supply chain. For more information on the Company, please visit our website at www.titanminingcorp.com

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Cautionary Note Regarding Forward-Looking Information

Certain statements and information contained in this new release constitute "forward-looking statements", and "forward-looking information" within the meaning of applicable securities laws (collectively, "forward-looking statements"). These statements appear in a number of places in this news release and include statements regarding our intent, or the beliefs or current expectations of our officers and directors, including the potential to satisfy a substantial portion of U.S.



germanium demand through recovery from existing material streams; potential recovery enabled through Titan's existing processing infrastructure, minimizing additional capital requirements; leveraging our existing operations at Empire State Mine allows us to accelerate development at minimal cost while contributing to a stronger, more resilient U.S. critical minerals supply chain; and Titan's discovery in New York being a potential first step toward restoring a secure, domestic supply of germanium. When used in this news release words such as "to be", "will", "planned", "expected", "potential", and similar expressions are intended to identify these forward-looking statements. Although the Company believes that the expectations reflected in such forward-looking statements and/or information are reasonable, undue reliance should not be placed on forward-looking statements since the Company can give no assurance that such expectations will prove to be correct. These statements involve known and unknown risks, uncertainties and other factors that may cause actual results or events to vary materially from those anticipated in such forward-looking statements, including risks relating to cost increases for capital and operating costs; risks of shortages and fluctuating costs of equipment or supplies; risks relating to fluctuations in the price of zinc and graphite; the inherently hazardous nature of mining-related activities; potential effects on our operations of environmental regulations in New York State; risks due to legal proceedings; risks that the Company will not qualify for NYSE listing; financing approval risks; and risks related to operation of mining projects generally and the risks, uncertainties and other factors identified in the Company's periodic filings with Canadian securities regulators. Such forward-looking statements are based on various assumptions, including assumptions made with regard to our forecasts and expected cash flows; our projected capital and operating costs; our expectations regarding mining and metallurgical recoveries; mine life and production rates; that laws or regulations impacting mining activities will remain consistent; our approved business plans; our mineral resource estimates and results of our technical studies; our experience with regulators; political and social support of the mining industry in New York State; our experience and knowledge of the New York State mining industry and our expectations of economic conditions and the price of zinc and graphite; demand for graphite; exploration results; the ability to secure adequate financing (as needed); the Company maintaining its current strategy and objectives; assumptions that the Company will qualify for NYSE American listing; assumptions that the Company and EXIM will agree to financing terms; and the Company's ability to achieve its growth objectives. While the Company considers these assumptions to be reasonable, based on information currently available, they may prove to be incorrect. Except as required by applicable law, we assume no obligation to update or to publicly announce the results of any change to any forward-looking statement contained herein to reflect actual results, future events or developments, changes in assumptions or changes in other factors affecting the forward-looking statements. If we update any one or more forward-looking statements, no inference should be drawn that we will make additional updates with respect to those or other forward-looking statements. You should not place undue importance on forward-looking statements and should not rely upon these statements as of any other date. All forward-looking statements contained in this news release are expressly qualified in their entirety by this cautionary statement.