Titan Mining Announces District Scale Exploration Plans and Extended Life of Mine Plan at its 100% Owned Empire State Mines

Vancouver, BC – January 7, 2025 – Titan Mining Corporation (TSX: TI, OTCQB: TIMCF) ("**Titan**" or the "**Company**") is pleased to announce district scale exploration plans, updated mineral resource estimate and extended mine life for its Empire State Mines ("**ESM**") zinc operations. The regional and near mine exploration plans cover ESM's 80,000 acres of controlled mineral rights in upstate New York and target multiple high quality, near mine and district scale targets with potential to increase near term production and further extend mine life.

Highlights:

- Increase in measured & indicated contained pounds of zinc by 22%[1] as compared to Titan's 2020 Zinc Mineral Resource Estimate (net of depletions)
- Updated base case life of mine plan with extended life of mine until 2033
- The updated life of mine plan (the "**Zinc LOM Plan**") provides total recoverable zinc of 636 million pounds and payable zinc production of 541 million pounds.
- Established operating base with 5,000 tpd mill and 130+ employee workforce in a Tier 1 jurisdiction
- 40,000 ft of near mine underground drilling planned in 2025 within existing mining areas. 31,000 ft of exploration drilling also planned for 2025 with 13,000 ft in near mine drilling and 18,000 ft in regional surface drilling
- The 100+ year track record at ESM of converting near-mine exploration targets into production suggests the Company's exploration program has the potential to continue adding incremental production in the near term
- The exploration drilling comprises fifteen drill ready targets. Of these, eleven are within the historic Balmat (ESM) – Pierrepont trend
- Total near mine targets for further exploration are estimated to contain between 4.8mt-5.3mt of mineralized material at average zinc grades of 10-14%, containing 935 mlbs to 1,470 mlbs of contained zinc

The potential quantity and grade of these exploration targets are based on historic production figures from geologically similar horizons. The potential quantity and grade is conceptual in nature and there has been insufficient exploration to define a mineral resource at these targets. It is uncertain if further exploration will result in these targets being delineated as a mineral resource.

Don Taylor, CEO of Titan commented: "*We are pleased with the results of the most recent Zinc LOM Plan demonstrating an increased mine life and a strong base case production. As we ramp up exploration plans in 2025, we aim for increased production and a significantly enhanced mine-life. We see a bright future*

[1] Includes the open pit resource

for ESM in 2025 and beyond, as the team continues to focus on lowering unit costs, expanding the mineral resource, growing zinc production while we continue our evaluation of the Kilbourne graphite project."

Rita Adiani, President of Titan commented: "*Our Zinc business demonstrates a robust growth profile and significant volumes of contained zinc in near mine exploration targets. Our existing infrastructure and 5,000 tpd mill provide the unique opportunity to translate exploration into production in the near term at a low capital cost. Our management team remains focused on delivering value growth for shareholders as we assess and deliver on the district scale potential in a Tier 1 jurisdiction."*

2024 Zinc Mineral Resource Tables

Table 1: Underground Mineral Resource Estimate

Classification	Tons (000's US short tons)	Zn (%)	Contained pounds (Mlbs)
Measured	295	17.1	101
Indicated	1,158	15.7	364
Measured + Indicated	1,453	16.0	465
Inferred	4,327	12.1	1,049

Source: ESM 2024

Notes:

1. *The qualified person for the 2024 Zinc Mineral Resource Estimate (the "2024 Zinc MRE"), as defined by National Instrument ("NI") 43-101 guidelines, is Donald (Don) R. Taylor, of Titan Mining Corp., SME registered member (#4029597).*
2. *Three-dimensional (3D) wireframe models of mineralization were prepared in Leapfrog Geo based on the geological interpretation of the logged lithology on contiguous grade intervals defining mineralized sub-domains. The 2024 Zinc MRE (underground) encompasses 36 vein domains and 6 indicator RBF interpolant shells totaling 42 individual wireframes.*
3. *Geological and block models for the 2024 Zinc MRE (underground) used data from a total of 1,100 surface and underground diamond drill holes (core). The drill hole database was validated prior to resource estimation and QA/QC checks were made using industry-standard control charts for blanks and commercial certified reference material inserted into assay batches by Empire State Mine personnel.*
4. *High-grade capping was evaluated and implemented on the raw assay data on a per-zone basis using histograms and log-probability plots. Outliers were further evaluated during estimation and limited if necessary using the Leapfrog Edge clamping method.*
5. *The 2024 Zinc MRE was compiled from 10 individual block models that were prepared using Leapfrog Edge. Block models were sub-blocked at domain boundaries and samples were composited using vein length intervals where a single composite is generated for each complete vein intersection with a drillhole. Composites were generated within the indicator RBF interpolant models as 10 foot run-length composites with residuals less than 5 feet added to the prior interval, honoring the modeled geological boundaries. Grade estimation was carried out using Inverse Distance Weighted (IDW) methods coupled with variably orientated search ellipses derived from modelled vein surfaces.*
6. *The specific gravity (SG) assessment was carried out for all domains using measurements collected during the core logging process. Where there is sufficient sampling the SG is interpolated into model blocks using IDW techniques. If insufficient sampling exists then density was assigned to models based on calculated means or by a regression formula.*
7. *Resources are reported using a 5.3% Zinc cut-off grade, based on actual break-even mining, processing, G&A costs, and smelter terms from the ESM operation at a zinc recovery of 96.4%.*
8. *Resources stated as in-situ grade at a Zinc price of $1.30/lb.*
9. *The resource classification considered the quality, quantity and distance to the data informing blocks in the model, as well as the geological continuity of the mineralized zones. Classification parameters vary slightly depending on the nature and continuity of the individual zones. Block classification was explicitly domained based on a calculation that used quality, quantity, and distance parameters.*

10. *Quantities and grades in the 2024 Zinc MRE are rounded to an appropriate number of significant figures to reflect that they are estimations.*
11. *The 2024 Zinc MRE was prepared following the CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (November 29, 2019).*
12. *CIM definitions and guidelines for Mineral Resource Estimates have been followed.*
13. *The effective date of the underground mineral estimate is July 16, 2024.*

Zinc LOM Plan Update Summary

Table 2 presents the key metrics of the Zinc LOM Plan compared to the LOM Report issued in 2021 (the "**2021 Zinc LOM Plan**"), considering the comparable periods from July 16, 2024 onwards (the effective date of the Zinc LOM Plan).

The total zinc production in the Zinc LOM Plan has increased by 35% compared to the 2021 LOM Plan. LOM throughput rate increased by 37% to 1,775 tons per day with total tons processed increased by 35% to 4.5mt over LOM.

Table 2- Summary of the Zinc LOM Plan and Comparison to the 2021 Zinc LOM Plan

LOM Plan comparisons	Unit	Latest Zinc LOM Plan	2021 Zinc LOM Plan	Change	Change (%)[2]
Mine Life	Years	9	7	2	29%
Resource Mined	kt	4,469	3,309	1,160	35%
LOM Throughput Rate	t/d	1,775	1,294	481	37%
Average Head Zinc Grade	% Zn	7.4	6.6	0.8	12%
LOM Recovered Zinc	Mlbs	636	470	166	35%
LOM Payable Zinc	Mlbs	541	400	141	35%

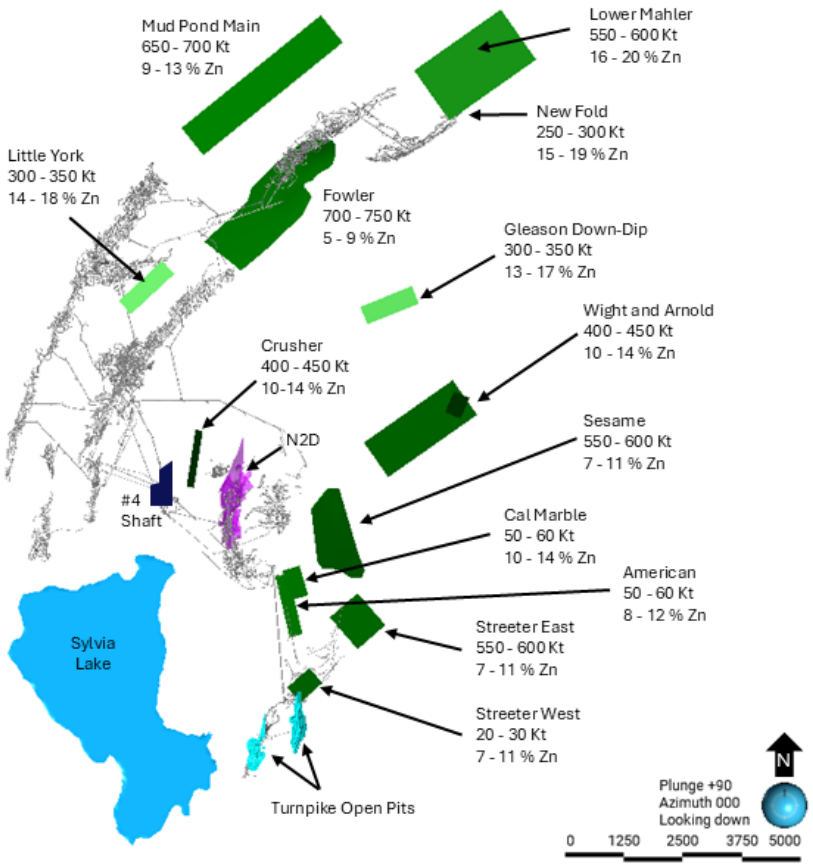
Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that any part of the Mineral Resources estimated will be converted into a Mineral Reserves Estimate. The results disclosed herein are the results of a preliminary economic assessment. On this basis, it is considered preliminary in nature, it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the preliminary economic assessment will be realized.

Opportunities - Near Term Increase in Production and District Scale Potential

Titan is assessing various near term production increase opportunities at N2D and Turnpike. Accelerating mining of N2D and commencement of open pit mining at Turnpike could increase near term production, cash flows and project NPV over the life of the zones. Near mine exploration targets provide opportunities for mineral resource expansion that could increase mine life and are summarized in Figure 3 below.

[2] Net of depletions

Figure 3- Near mine exploration and production opportunity targets



Targets for exploration drilling can be broken into three categories, near mine, within the Balmat (ESM #1-#4) - Pierrepont trend, and within the greater district. Figure 4 shows the current near mine drill targets.

In 2025, near mine exploration is expected to expand the Mahler, Mud Pond Main and New Fold zones with planned underground drilling totaling 40,000 ft and test Arnold Pit/Wight, Streeter East, Streeter West, and Little York with planned surface drilling totaling 13,000 ft.

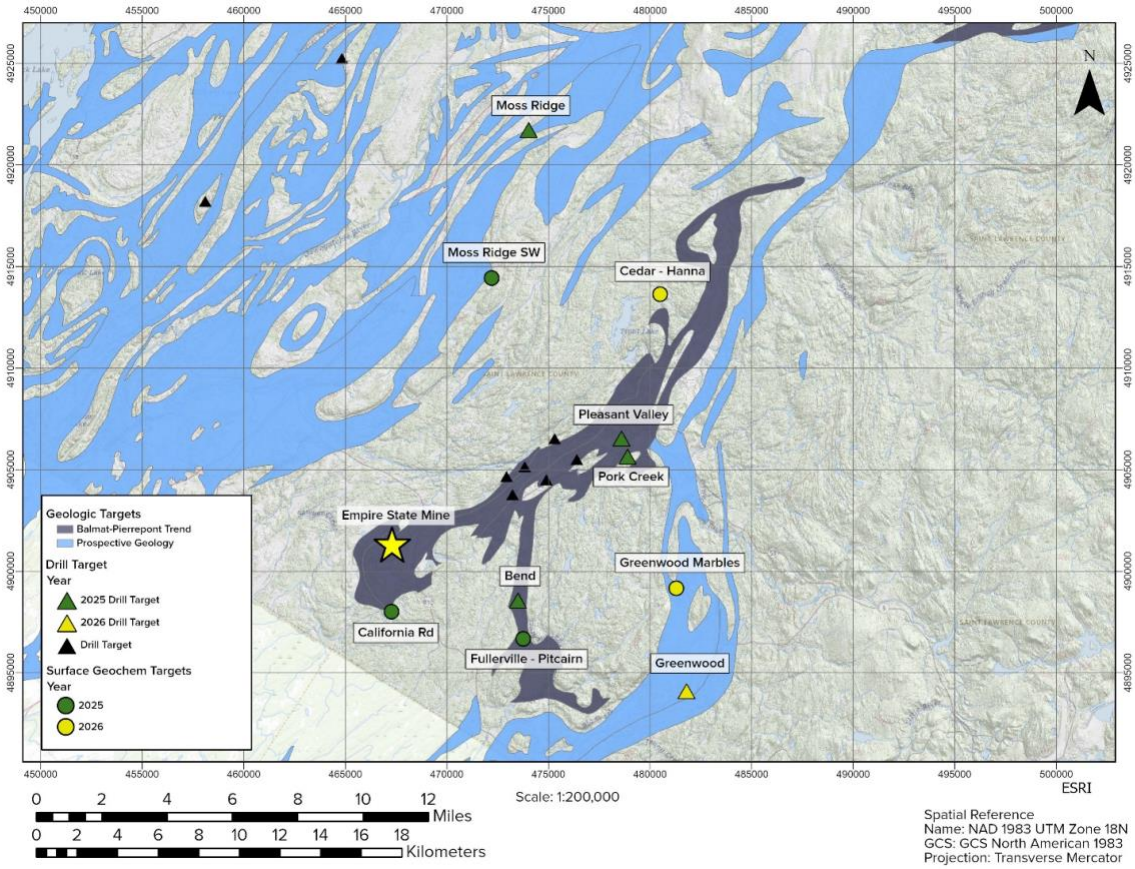
Total near mine targets for further exploration are estimated to contain between 4.8mt-5.3mt of mineralized material at average zinc grades of 10-14%, containing 935 Mlbs to 1,470 Mlbs of contained zinc, providing significant potential to increase mine life. The potential quantity and grade of these exploration targets are based on historic production figures from geologically similar horizons. The potential quantity and grade is conceptual in nature and there has been insufficient exploration to define a mineral resource at these targets. It is uncertain if further exploration will result in these targets being delineated as a mineral resource.

In addition to the near mine targets, the Company has developed an additional fifteen drill ready targets. Of these, eleven are within the historic Balmat (ESM) – Pierrepont trend. Targeting has focused on: the extension of historic mineralized intercepts with room down dip, and along strike to accommodate a significant body of mineralization; testing historically productive stratigraphic units; and testing down dip from surficial zinc anomalies. Targets for the 2025 in trend drill program include Pleasant Valley, Pork Creek, and Bend (See Figure 4 below).

There are currently four drill ready targets within the district. These target: the down dip extensions of zinc anomalies identified through surface geochemical sampling; stratigraphy with known past base metal production; and conceptual geologic and geophysical targets. The Company currently has 18,000 ft planned to test targets within the trend and district. The primary district drill target for 2025 is Moss Ridge.

In addition to the 71,000 ft planned for the 2025 drill programs, the Company plans on collecting greater than 2,000 soil samples annually from its existing and future mineral tenure. This program will begin targeting historically productive stratigraphic units within the trend, and historic geochemical samples (rock and soil) with elevated Zn recorded. The Company's 2022 soil program led to the development of the Pork Creek, and Moss Ridge drill targets.

Figure 4 – District Drilling and Geochemical Sampling Targets



An NI 43-101 technical report supporting the results disclosed herein will be filed on SEDAR+ within 45 days of the Company's December 3, 2024 press release.

Quality Assurance and Quality Control

Core drilling was completed using ESM owned and operated drills which produced AWJ (1.374 in) size drill core. All core was logged by ESM employees. The core was washed, logged, photographed, and sampled. All core samples were cut in half, lengthwise, using a diamond saw with a diamond-impregnated blade and sampled on 5 ft intervals with adjustments made to match geological contacts. After a sample is cut, one half of the core was returned to the original core box for reference and long-term storage. The second half was placed in a plastic or cloth sample bag, labeled with the corresponding sample identification number, along with a sample tag. All sample bags were secured with staples or a draw string, weighed and packed in shipping boxes.

For graphitic samples, shipping boxes are placed onto pallets and shipped by freight to SGS Lakefield laboratory in Lakefield, ON, Canada for sample preparation and graphitic carbon analysis. Pulps are forwarded to SGS Burnaby laboratory in Burnaby, BC, Canada for multi-element analysis. SGS Lakefield is a Canadian accredited laboratory (ISO/IEC 17025) and independent of ESM. SGS Lakefield prepares the pulps and analyzes each sample for graphitic carbon (Cg-CSA06V) with a detection limit of >0.01%. Pulps are shipped to SGS Burnaby for multi-element analysis by aqua regia digestion (GE-ICP21B20 for 34 elements) with an ICP – OES finish. All samples in which silver, calcium, manganese, iron, zinc and sulfur exceed their upper limit are re-run using methods of aqua regia digestion (Fe-ICP21B100), four acid digestion (Ag, Ca, Zn, and Mn-ICP42Q100) and infrared combustion (S-CSA06V) with the elements reported in percentage (%). Standards and blanks are inserted during the logging process. The assays for QA/QC samples are reviewed as certificates are received from the laboratory. Failures are identified on a batch basis and followed up as required.

For samples related to zinc operations and exploration, shipping boxes are placed on pallets and shipped by freight to ALS Geochemistry ("ALS"), an independent ISO/IEC accredited lab located in Sudbury, Ontario, Canada. ALS prepares a pulp of all samples and sends the pulps to their analytical laboratory in Vancouver, B.C., Canada, for analysis. ALS analyzes the pulp sample by an aqua regia digestion (ME-ICP41 for 35 elements) with an ICP – AES finish including Cu (copper), Pb (lead), and Zn (zinc). All samples in which Cu (copper), Pb (lead), or Zn (zinc) are greater than 10,000 ppm are re-run using aqua regia digestion (Cu-OG46; Pb-OG46; and Zn-OG46) with the elements reported in percentage (%). Silver values are determined by an aqua regia digestion with an ICP-AES finish (ME-ICP41) with all samples with silver values greater than 100 ppm repeated using an aqua regia digestion overlimit method (Ag-OG46) calibrated for higher levels of silver contained. Gold values are determined by a 30 g fire assay with an ICP-AES finish (Au-ICP21).

Mr. Taylor has a fulsome staff of experts on-site that thoroughly review and verify ESM technical data on a regular basis, as described above. For this reason, Mr. Taylor has relied entirely on such verification procedures for verifying the scientific and technical data in this news release. Mr. Taylor has not identified any legal, political, environmental, or other risks that could materially affect the potential development of the mineral resources disclosed herein.

Qualified Person

The scientific and technical information contained in this news release has been reviewed and approved by Donald R. Taylor, MSc., PG, Chief Executive Officer of the Company, and Deepak Malhotra, P. Eng, who is independent of the Company. Each of Mr. Taylor and Mr. Malhotra is a qualified person for the purposes of NI 43-101. Mr. Taylor has more than 25 years of mineral exploration and mining experience and is a Registered Professional Geologist through the SME (Registered Member #4029597). Dr. Malhotra has more than 52 years of mineral exploration and mining experience and is a Registered Professional Geologist through the SME (Registered Member No. 2006420).

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. The Company is focused on value creation and operating excellence, with a strong commitment to developing critical mineral assets that enhance the security of the U.S. supply chain. For more information on the Company, please visit our website at www.titanminingcorp.com.

Contact

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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 realization of the results of the PEA, including an increased mine life, the results of the new mine plan, mine design, economic and financial results; we see a bright future for ESM in 2025 and beyond, as the team continues to focus on lowering unit costs, expanding the mineral resource base, and growing production, and potential future exploration results; our existing infrastructure and 5,000 tpd mill provides the unique opportunity to translate exploration into production in the near term at a low capital cost; near term and existing drilling continues and is expected to expand the Mahler, Mud Pond Main and New Fold zones with 40,000 ft of drilling targeted for 2025; accelerating production from N2D has the potential to increase project NPV over the life of the zone and add incrementally to near term production and cash flows; drilling of surface near-mine and district exploration targets to be increased in 2025 with key targets being Pleasant Valley, Pork Creek, Moss Ridge, Bend, Little York , Streeter East, and Streeter West; 31,000 ft of exploration drilling planned for 2025 with 13,000 ft in near mine drilling and 18,000 ft in regional surface drilling; estimates; total near mine targets for further exploration are estimated to contain between 4.8mt-5.3mt of mineralized material at average zinc grades of 10-14%, containing 935 mlbs to 1,470 mlbs of contained zinc, providing significant potential to increase mine life; realization of near mine exploration targets that provide mineral resource expansion and increase mine life; exploration targets and plans. 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; 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 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 the PEA; 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; the ability to advance exploration efforts at ESM; the results of such exploration efforts; the ability to secure adequate financing (as needed); the Company maintaining its current strategy and objectives; 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.