ANNUAL INFORMATION FORM

For the Year Ended December 31, 2025

Dated: March 17, 2026

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PRELIMINARY NOTES

This Annual Information Form ("**AIF**") takes into account information available up to and including December 31, 2025, unless otherwise indicated. Throughout this document the terms "**we**", "**us**", "**our**", the "**Company**" and "**Titan Mining**" refer to Titan Mining Corporation.

All financial information in this AIF is prepared in accordance with International Financial Reporting Standards ("**IFRS**") as issued by the International Accounting Standards Board. Additional financial information may be found in the Company's audited consolidated financial statements and management's discussion and analysis for the year ended December 31, 2025.

Currency

All dollar amounts are expressed in US dollars unless otherwise indicated.

Cautionary Note Regarding Forward-Looking Information

Certain information contained in this document constitutes forward-looking statements. All statements, other than statements of historical facts, are forward looking statements, including but not limited to the Company's 2026 priorities and planned activities at ESM and the Kilbourne Graphite Project; 2026 production guidance and related expectations; that the Company continues to examine various financing options to expand production and to bolster the Company's treasury; Mineral Resource estimates; results from economic analyses on ESM; production forecasts; anticipated underground development and access to higher-quality ore bodies at ESM; plans to evaluate and implement operating efficiencies and support future production from existing mining areas, including the #2 and #4 mine complex; exploration, drilling and other work programs across the broader district (including the Company's expanded mineral tenure) and at the Kilbourne Graphite Project, and the timing and results thereof; the discovery of significant concentrations of germanium and the advancement of test work to evaluate the recovery of germanium identified within existing ESM process streams; the technical and economic viability of recovering germanium as a potential byproduct from zinc operations; advancement of the Kilbourne Graphite Project through feasibility, including anticipated workstreams such as drilling, mine design, metallurgical and process optimization, infrastructure and permitting activities, and customer qualification efforts through the demonstration facility; the continued operation of the Kilbourne Graphite Project demonstration facility and production of natural flake graphite concentrate for customer and government qualification programs; the Company's expectations regarding downstream process design, partnerships and commercial discussions in support of its integrated U.S. graphite strategy; the timing of any construction decision for the Kilbourne Graphite Project; and the Company's ability to maintain and enhance financial flexibility through cash flow from ESM, existing financing arrangements and access to capital markets.

The forward-looking statements are based on a number of assumptions which, while considered reasonable by the Company, are subject to risks and uncertainties. The Company cautions readers that forward-looking statements involve and are subject to known and unknown risks, uncertainties and other factors which may cause actual results, performance or achievements to differ materially from those expressed in or implied by such forward-looking statements and forward-looking statements are not guarantees of future results, performance or achievement. The Company has made assumptions based on or related to many of these risks, uncertainties and factors. These risks, uncertainties and factors include general business, economic, competitive, political, regulatory and social uncertainties; actual results of exploration activities and economic evaluations; fluctuations in currency exchange rates; changes in project parameters; changes in costs, including labour, infrastructure, operating and production costs; future prices of zinc, graphite and other minerals; variations of mineral grade or recovery rates; operating or technical difficulties in connection with exploration, development or mining activities, including the failure of plant, equipment or processes to operate as anticipated; delays in completion of exploration, development or construction activities; changes in government legislation and regulation; the ability to maintain and renew existing licenses and permits or

obtain required licenses and permits in a timely manner; the ability to obtain financing on acceptable terms in a timely manner; contests over title to properties; employee relations and shortages of skilled personnel and contractors; the speculative nature of, and the risks involved in, the exploration, development and mining business; assumptions as to mining dilution; assumptions as to closure costs and closure requirements; environmental risks; unanticipated reclamation expenses; unexpected variations in quantity of mineralized material, grade or recovery rates; geotechnical or hydrogeological considerations during mining being different from what was assumed; changes to assumptions as to salvage values; ability to maintain the social license to operate; changes to interest rates; changes to tax rates, including federal, state and county income and property tax rates; impact of inflationary pressures, supply chain disruptions, geopolitical conflicts and trade measures such as tariffs; and the factors discussed in the section entitled "Risks Factors" in this document.

Although the Company has attempted to identify important risks, uncertainties and other factors that could cause actual performance, achievements, actions, events, results or conditions to differ materially from those expressed in or implied by the forward-looking information, there may be other risks, uncertainties and other factors that cause performance, achievements, actions, events, results or conditions to differ from those anticipated, estimated or intended. Unless otherwise indicated, forward-looking statements contained herein are as of the date hereof and the Company disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or results or otherwise, except as required by applicable law.

CORPORATE STRUCTURE

Name, Address and Incorporation

The Company was incorporated under the *Business Corporations Act* (British Columbia) on October 15, 2012. On November 10, 2016, the Company amended its articles of incorporation to change the name of the Company from "Triton Mining Corporation" to "Titan Mining Corporation". On June 13, 2017, the Company filed a notice of alteration to amend its authorized share capital by re-designating its Class A shares as Common Shares. A copy of the Company's Articles of Incorporation is available under the Company's profile on SEDAR+ at www.sedarplus.ca.

Titan Mining is listed on the NYSE American LLC ("**NYSE-A**") under the symbol TII and the Toronto Stock Exchange ("**TSX**") under the symbol TI.

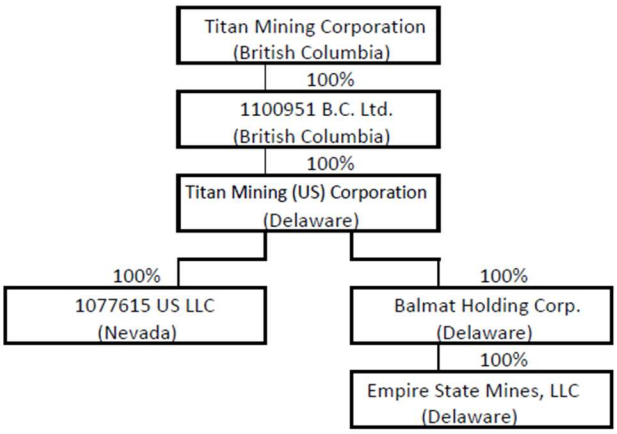
The Company has an office at 408 Sylvia Lake Rd, Gouverneur, NY, 13642 and its registered office is located at Suite 2900, 550 Burrard Street, Vancouver, BC V6C 3E1.

On November 10, 2016, the Company amended its articles of incorporation to change the name of the Company from "Triton Mining Corporation" to "Titan Mining Corporation".

On June 13, 2017, the Company filed a notice of alteration to amend its authorized share capital by re-designating its Class A shares as Common Shares.

Intercorporate Relationships

The following chart identifies Titan Mining's subsidiaries (including jurisdiction of formation or incorporation of the various entities). Except for 1077615 US LLC, all subsidiaries are material subsidiaries.



GENERAL DEVELOPMENT OF THE BUSINESS

Titan Mining is a natural resource company engaged in the acquisition, exploration, development and production of mineral properties. The Company's principal asset is its indirect ownership interest (as illustrated in the chart above) of Empire State Mines, LLC, which owns the Empire State Mines project in St Lawrence County, New York ("**ESM**" or the "**Empire State Mine**"). ESM is comprised of the Company's Kilbourne Graphite Project as well as a group of past producing zinc mines including the #2, #3, #4, Hyatt, Pierrepont and Edwards mines. Titan declared commercial production at its ESM zinc operations as at and for the period ended December 31, 2020. Titan is also a natural flake graphite producer and the USA's first end-to-end producer of natural flake graphite in 70 years.

Three Year History

Set out below is a summary of how the Company's business has developed over the last three completed financial years. In accordance with Form 51-102F2 *Annual Information Form*, the below summary includes only events, such as acquisitions or dispositions, or conditions that have influenced the general development of the business.

Operations at the Empire State Mine

On January 25, 2023, the Company announced that it planned to begin construction of the Turnpike project (formerly Sphaleros). On August 11, 2023, the Company announced work at Turnpike was temporarily suspended in order to preserve cash.

On January 31, 2023, the Company announced a discovery of near-mine proximity to the Company's New Fold and Mahler bodies.

On June 14 and September 14, 2023, the Company announced further updates to its exploration drilling, revealing both surface and underground drilling programs were successful in intercepting significant zinc mineralization.

On October 23, 2023, the Company announced the discovery of the Kilbourne Graphite Project, an extensively drill tested graphite-bearing trend located almost entirely on the active use permit hosting ESM.

On April 19, 2024, the Company announced initial drill results at the Kilbourne Graphite Project and, on June 16, 2024, the Company announced completion of Phase I drilling at the Kilbourne Graphite Project.

On December 3, 2024, the Company announced an initial maiden mineral resource estimate at its Kilbourne Graphite Project.

On January 7, 2025, the Company announced an updated mineral resource estimate and extended mine life for its ESM zinc operations. On May 8, 2025, the Company announced the addition of 43,943 acres of mineral rights expanding its mineral tenure in upstate New York to over 120,000 acres.

On May 20, 2025, the Company announced the launch of construction of its fully permitted demonstration facility for natural flake graphite co-located at ESM.

On October 20, 2025 the Company announced the discovery of significant concentrations of germanium within existing process streams at ESM.

On December 1, 2025, the Company announced positive results from its Preliminary Economic Assessment for the Kilbourne Graphite Project.

On January 26, 2026 the Company announced commencement of graphite concentrate production at ESM.

Financings

On November 1, 2023, the Company entered into a promissory note (the "**November 2023 Promissory Note**") with a company owned by the Company's Executive Chairman (the "**Lender**"). The November 2023 Promissory Note was in a principal amount of $5,000,000 plus an initiation fee of $350,000, bore interest at 10% compounded annually, and matured on May 1, 2025. The proceeds were used to repay part of its existing credit facility with National Bank of Canada (the "**Credit Facility**"). In connection with the Promissory Note, the Company issued 4,000,000 warrants (post Consolidation) to the Lender. Each warrant entitles the Lender to acquire one common share of the Company at an exercise price of C$0.63 per share (post Consolidation) until November 1, 2028.

On April 16, 2024, the Company announced a $10,000,000 bridge loan from the Lender. Proceeds from this loan were used to repay part of the Credit Facility. On July 21, 2025, the Company and the Lender entered into a credit agreement (the "**Augusta Credit Agreement**") providing terms for the foregoing advances aggregating US$16.5 million.

On December 11, 2024, the Company announced that it had agreed to certain amendments to the Credit Facility, including: (i) principal repayment of $5 million by December 30, 2024, for an aggregate of $17 million in principal repaid in 2024; (ii) extension of the Credit Facility maturity date from June 30, 2025 to December 31, 2025; and (iii) extension of the remaining principal repayment from US$10.2 million by June 30, 2025 to $5 million by June 30, 2025 and $5.2 million by December 31, 2025. The Credit Facility was fully repaid by December 31, 2025.

On July 21, 2025, the Company announced it had entered into a definitive credit agreement (the "**EXIM Facility**") with the Export-Import Bank of the United States ("**EXIM**") under the Make More in America ("**MMIA**") initiative. The EXIM Facility provided funding of up to US$15.8 million towards critical capital development supporting current operations and planned expansion at ESM's underground zinc mine in St. Lawrence County, New York. On December 1, 2025, the Company announced that EXIM had approved an additional $5.5 million of non-dilutive MMIA funding, on similar terms to the EXIM Facility, to accelerate feasibility work at Kilbourne.

On October 7, 2025, the Company announced the issuance by EXIM of a non-binding Letter of Interest for up to $120 million of project financing, expected to fund the majority of construction capital for the Kilbourne Project, subject to customary due diligence and approvals.

On December 18, 2025, the Company closed its private placement (the "**Offering**"), pursuant to which the Company issued 6,666,666 special warrants (each, a "**Special Warrant**") at a price equal to US$2.25/C$3.10

per Special Warrant (the "**Issue Price**"). Each Special Warrant entitled the holder, for no additional consideration and upon the satisfaction of certain conditions, to receive one Common Share and one Common Share purchase warrant (each, a "**Warrant**") for aggregate gross proceeds of US$15 million. Each Warrant is exercisable for a period of up to three years following issuance, with 50% of the Warrants exercisable at a 35% premium to the Issue Price and the remaining 50% exercisable at a 65% premium to the Issue Price. The Company may call the Warrants if its Common Shares trade at greater than 150% of the applicable exercise price for 15 trading days within any 30-day period, upon providing 30 days' prior notice. The Offering was completed pursuant to an agency agreement between the Company and Maxim Group LLC dated December 16, 2025 (the "**Agency Agreement**"). On February 4, 2026, the Special Warrants were converted into the underlying Common Shares and Warrants.

On January 28, 2026, the Company established an "at-the-market" equity program (the "**ATM Program**") under its base shelf prospectus in Canada and registration statement on Form F-10 in the United States that allows the Company to issue and sell, from time to time through sales agents, at prevailing market prices for up to US$50 million (or the Canadian dollar equivalent) of Common Shares from treasury to the public, at the Company's discretion. Distributions of Common Shares through the ATM Program, if any, will be made pursuant to the terms of an equity distribution agreement dated January 28, 2026 (the "**Equity Distribution Agreement**") with a syndicate of sales agents comprised of BMO Capital Markets Corp., BMO Nesbitt Burns Inc., Cantor Fitzgerald & Co., Cantor Fitzgerald Canada Corporation, H.C. Wainwright & Co., LLC and Maxim Group LLC.

Corporate

On February 2, 2023, the Company announced that it had entered into a fixed zinc pricing arrangement with National Bank for approximately 30% of the Company's forecasted zinc production for the eleven-month period covering February 2023 to December 2023 at a price of $1.55 per pound of zinc.

On March 28, 2024, the Company announced the appointment of Ty Minnick as Interim CFO of the Company.

On September 26, 2024, the Company announced the appointment of Rita Adiani as President of the Company.

On April 8, 2025, the Company announced the appointment of Kevin Hart as Chief Financial Officer of the Company.

On September 8, 2025, the Company announced plans to pursue a listing on the NYSE-A as part of its U.S. growth strategy. Additionally, the Company promoted Rita Adiani to Chief Executive Officer. Ms. Adiani continued in her role as President and joined the Board of Directors. She succeeded Don Taylor, who transitioned to Vice Chair of the Board, ensuring continuity and providing technical oversight. Titan also appointed Jenny Hood as Vice President, Commercial and Sales, and Irina Kuznetsova as Director, Investor Relations.

On November 3, 2025, the Company announced that it had consolidated the issued and outstanding common shares in the authorized share structure of the Company on the basis of a ratio of one new Common Share for every 1.5 existing Common Shares (the "**Consolidation**"). The Consolidation was undertaken solely to align the Company with typical U.S. market standards.

On November 21, 2025, the Company's Common Shares commenced trading on the NYSE-A.

2026 Outlook

Titan's priorities in 2026 are on continued operating performance at Empire State Mines ("ESM"), advancement of the Kilbourne Graphite Project, and disciplined allocation of capital to support development and exploration activities.

At ESM, the Company's 2026 mine plan is focused on underground development and sustained access to higher-quality ore bodies in order to support stable production and cost control. The Company has provided 2026 production guidance of 73 to 78 million recoverable pounds of zinc, or 62 to 66 million payable pounds of zinc. Titan also intends to continue evaluating opportunities to improve operating efficiency and support future production from existing mining areas, including the #2 and #4 mine complex, while advancing exploration targets across the broader district. Titan continues to also explore for other critical, base and precious metals in the district.

The Company is also advancing test work to evaluate the recovery of germanium identified within existing ESM process streams. During 2026, Titan expects to continue assessing the technical and economic viability of recovering germanium as a potential byproduct from its zinc operations.

At the Kilbourne Graphite Project, Titan's primary objective in 2026 is to advance the project through feasibility. Work is expected to include infill, geotechnical and exploration drilling, updated mine design, mineral resource and reserve work, metallurgical and process optimization, infrastructure and permitting activities, and customer qualification efforts through the demonstration facility. Subject to the results of these activities, permitting progress, financing and market conditions, Titan is targeting a construction decision in late 2026 or early 2027.

The Company also expects the Kilbourne demonstration facility to continue producing natural flake graphite concentrate for customer and government qualification programs during 2026. In parallel, Titan intends to continue advancing downstream process design, partnerships and commercial discussions in support of its integrated U.S. graphite strategy.

Titan expects to maintain and enhance financial flexibility in 2026 through cash flow from ESM, existing financing arrangements and access to capital markets, while continuing to evaluate funding alternatives to support ongoing development at Kilbourne and other corporate initiatives.

DESCRIPTION OF THE BUSINESS

General

Summary - The Company is engaged in the acquisition, exploration, development and extraction of natural mineral resources. The Company's primary source of revenue is from sales of zinc concentrates produced at ESM. The zinc concentrates produced by the Company at ESM are 100% sold to Glencore Ltd. pursuant to an off-take agreement between the Company and Glencore Ltd. dated October 27, 2017,. The Company is also advancing its Kilbourne Graphite Project located at ESM. The Company announced results of a preliminary economic assessment for Kilbourne on December 11, 2025. A summary of results are set out below under "Empire State Mine" and in the Technical Report, which is incorporated by reference herein. In January 2026, the Company announced commencement of production from the demonstration facility for Kilbourne becoming the first end to end producer of natural flake graphite in the USA in 70 years.

Production and Services – ESM's zinc operations reached commercial production as at and for the period ended December 31, 2020. The method of production at ESM's #4 mine consists of underground mining principally through long hole stoping, sub-level drift and pillar slashing, modified or stepped room and pillar, mechanized cut and fill and sub-level drives, access, and stope cross-cut development operations. Extracted ore is trucked to a conventional crushing, milling and processing plant. The Company envisions conventional owner-operated open pit mining methods will be used to mine the material within the designed open pit of the Kilbourne Project. This method was selected considering the Kilbourne Project's proximity to the surface.

Specialized Skill and Knowledge - Various aspects of the Company's business require specialized skills and knowledge. Such skills and knowledge include the areas of permitting, geology, drilling, engineering, mine planning, mining, milling, metallurgy, logistical planning and implementation of exploration and production programs as well as financing and accounting. While competitive conditions exist in the industry, and challenges in hiring at the mine site exists consistent with the industry, the Company has been able to locate and retain employees and consultants with such skills and believes it will continue to be able to do so in the future.

Competitive Conditions - Competition in the mineral exploration and mining industry is intense. The Company competes with other mining companies, many of which have greater financial resources and technical facilities for the acquisition and development of, and production from, mineral concessions, claims, leases and other interests, as well as for the recruitment and retention of qualified employees and consultants and, to a lesser extent, for the supply of raw materials. The price of graphite and zinc is also a factor affecting the Company as it is determined by world markets over which the Company has no influence or control as further described below under 'Business Cycles'. Our competitive position is primarily determined by our costs compared to other producers throughout the world and our ability to maintain our financial integrity through metal price cycles. In addition, the mining industry is competitive, particularly in the acquisition of additional mineral reserves and resources in all phases of operation, and we compete with many companies possessing similar or greater financial and technical resources. In terms of our Kilbourne Graphite Project, we also have a competitive advantage as we are the United States' first end-to-end producer of natural flake graphite in 70 years, at a time when the United States currently imports 100% of its natural graphite and is looking to establish a secure supply of graphite and other critical minerals.

Business Cycles - The mining business is subject to mineral price cycles and in the case of the Company, the price of zinc. The marketability of minerals and mineral concentrates (zinc) is also affected by worldwide economic cycles. The ultimate economic viability of ESM is primarily sensitive to the market price of zinc. Metal prices fluctuate widely and are affected by numerous factors such as global supply, demand, inflation, exchange rates, interest rates, forward selling by producers, central bank sales and purchases, production, global or regional political, economic or financial situations and other factors beyond the control of the Company.

Economic Dependence - On October 27, 2017, the Company concluded an offtake agreement with Glencore Ltd. for 100% of the zinc concentrate from ESM's #4 mine. The long-term contract commenced on January 1, 2018 with first concentrate being delivered in March 2018.

Environmental Protection - The Company's exploration, development and production activities are subject to United States laws and regulations regarding the protection of the environment. If required, Titan will make expenditures to ensure compliance with applicable laws and regulations. New environmental laws and regulations, amendments to existing laws and regulations, or more stringent implementation or enforcement of existing laws and regulations could have a material adverse effect on the Company's business, cash flows, earnings, results of operations, financial condition and prospects, by potentially increasing capital and/or operating costs and/or delaying or preventing the exploration and/or development of mineral properties. The Company intends to control and mitigate the environmental impact from the exploration, development and

production of its projects and their future operation. Reclamation plans approved by the NYSDEC are in place for ESM's #4 mine (formerly the Balmat No. 4 Mine) and the Balmat No. 2 shaft area (which is still in use as an alternate exit route and ventilation shaft for ESM's #4 mine) and are the ongoing responsibility of Empire State Mines LLC. ESM and mine tailings reclamation is guaranteed with a $2,474,000 certificate of deposit.

Employees – At December 31, 2025, the Company had 8 offsite employees and 159 employees at ESM's #4 mine. As operations require, the Company also retains geologists, engineers, geophysicists and other consultants on a fee for service basis. Certain of the employees have responsibilities with other publicly traded companies and, as such, the Company pays a pro-rata portion of the costs of such employees based on their time spent working on the Company's business.

Foreign Operations - Substantially all of the Company's long-term assets, primarily comprising its mineral properties, are located in St. Lawrence County, New York, USA.

Social and Environmental Policies - The Company has an Environmental, Health and Safety Policy. The focus of the policy is concern for the environment and the health and safety of individuals and the communities in which it operates. The Company endeavors to provide and maintain safe and healthy working conditions to safeguard its employees and the communities in which it operates. In doing so, the Company considers compliance with the regulatory standards as a minimum.

RISK FACTORS

The Company's activities and related results are subject to a number of different risks at any given time. Exploration and development of mineral resources involves a high degree of risk. A summary of the Company's financial instruments risk exposure is provided in the Financial Instruments section of the Company's 2025 Annual Financial Statements. The following are additional risk factors which the Company's management believes are most important in the context of the Company's business. It should be noted that this list is not fully comprehensive and that other risk factors may apply.

The Company has a limited operating history and there are risks with new production

The Kilbourne Project has a limited operating history, and prior to the successful production of natural flake graphite concentrate from the Kilbourne Project Facility in January 2026, the Company did not have a history of graphite production. Further, ESM's zinc operations were on care and maintenance since 2008 until recommencing operations in 2017. If the Company is unable to generate significant revenues from the Kilbourne Project and ESM's zinc operations, it may not be able to earn profits or continue operations. There can be no assurance that the Company will be successful in achieving or maintaining profitable operations. While the Company has been in commercial production from its zinc operations for over five years, the Company has a limited operating history from which its business and prospects can be evaluated, and forecasts of any potential growth of the business of the Company are difficult to evaluate. In addition, the Company has not made a decision to advance the Kilbourne Project to commercial production and may never do so.

The Company's prospects must be considered in light of the risks, expenses and difficulties frequently encountered by companies in similar stages of development, including under-capitalization, cash shortages, limitations with respect to personnel, financial and other resources, and lack of revenues. The advancement of these projects requires the dedication of considerable time and resources by the Company and its management team, along with the associated risk of strains arising on managerial, human and other resources. The Company's ability to successfully manage each of these processes will depend on a number of factors, including its ability to manage competing demands on time and other resources, financial or otherwise, and

to successfully retain personnel and recruit new personnel to support its growth and the advancement of its projects.

There may be requirements for additional capital in the future

Any future mining, production, processing, development and exploration by the Company may require substantial additional financing, including capital for the continuation or expansion of mining operations at the Kilbourne Project and ESM's zinc operations. Failure to obtain sufficient financing may result in delaying or indefinite postponement of the Company's business plans. There can be no assurance that additional capital or other types of financing will be available if needed or that, if available, the terms of such financing will be favourable to the Company. This uncertainty casts doubt about the Company's ability to continue as a going concern.

Financial leverage and restrictive covenants may restrict our current and future operations

The Company and its subsidiaries have agreed to various restrictive covenants with its lenders under its existing loan arrangements, including to maintain certain leverage and fixed charge ratios as well as minimum cash balances, make payments of interest and principal when due, to conduct its operations subject to certain restrictions and to comply with restrictions governing current and future indebtedness.

These restrictions prohibit or limit the Company's and its subsidiaries' ability to, among other things, incur most forms of additional debt, provide guarantees for indebtedness, create liens, dispose of assets, liquidate, dissolve, wind up, or assign or surrender a material contract. These restrictions may restrict the Company's ability to refinance its existing indebtedness. If the Company defaults in respect of its obligations under its loan arrangements, including without limitation servicing existing indebtedness, or if it is unable to refinance any such indebtedness, its lenders may be entitled to demand repayment and enforce their security against certain assets.

If there is any event of default under its existing loan arrangements, the principal amount owing, plus accrued and unpaid interest, may be declared immediately due and payable. If such an event occurs, or if any extended default under such agreements is ongoing, it could have a material negative impact on the Company financially.

In addition, the degree to which the Company and its subsidiaries are leveraged could have important consequences to shareholders, including: (i) the Company's ability to obtain additional financing for working capital, capital expenditures, acquisitions or other project developments in the future may be limited; (ii) a significant portion of the Company's cash flows from operations may be dedicated to the payment of the principal and interest on their indebtedness, thereby reducing funds available for future operations and flexibility to take advantage of business opportunities; (iii) the Company may be unable to refinance its existing indebtedness on terms favourable to the Company, if at all, and the consequences arising therefrom; and (iv) the Company may be more vulnerable to economic downturns and be limited in its ability to withstand competitive pressures. The inability to meet these debt covenants or obtain lenders' consent to carry out restricted activities could materially and adversely affect the business and results of operations of the Company.

The Company's ability to continue as a going concern is dependent upon the successful execution of its business plan, raising additional capital and/or evaluating strategic alternatives for its mineral property interests. The Company expects to continue to raise necessary funds through securing additional debt or equity in support of its business objectives. There can be no guarantees that debt/equity financing or strategic alternative will be available on acceptable terms to the Company or at all.

United States-Canada Tariffs

Recent executive orders have been issued by the U.S. President, including to direct the U.S. to impose new or increased tariffs on certain imports from its trading partners, including Canada, Mexico and China, and on certain other imports regardless of origin. The current U.S.-Canada tariff environment remains highly dynamic and uncertain. Legislative or regulatory changes by the U.S. administration could materially impact the Company's operations and financial condition. The executive orders contemplated the imposition of 25% tariffs on most goods imported from Mexico and Canada (excluding certain energy resources from Canada, which were set to face a lesser tariff) and a 10% additional tariff on all goods from China, with originally planned implementation dates of February 4, 2025 and March 4, 2025. In March 2025, the United States imposed a series of tariffs on goods imported from Canada and other countries, triggering a de facto global trade war, and prompting Canada and several trading partners to implement retaliatory measures. Since then, tariff policies have continued to evolve, creating ongoing uncertainty regarding U.S. support for existing trade agreements, including the USMCA. At present, the United States maintains tariffs on a range of Canadian exports and Canada has implemented certain reciprocal tariffs.

It remains unclear the extent to which additional duties, tariffs and/or other trade restrictions or other similar measures may be imposed by the United States or other countries, whether and if any changes to the currently announced tariffs will be applied, how long they may be in effect, the extent to which further retaliatory measures will be imposed, and whether other factors will support a pass through of all or a part of the tariffs to the market. On February 20, 2026, the U.S. Supreme Court held that the Trump administration lacked legal authority to impose certain tariffs under the International Emergency Economic Powers Act and the Trump administration indicated that it intends to impose alternative tariffs or adopt other trade measures. Changes to existing tariffs or new trade restrictions could materially impact the Canadian economy and the Company.

If high US tariffs are imposed on Canadian products and the products of other countries and Canada and the other countries retaliate with import tariffs on US products, the consequences on global supply chains could adversely impact the Company's ability to source the supplies the Company relies on to perform its planned work programs or operations or, if available, the cost of such supplies could increase, potentially impairing the Company's ability to complete work programs or conduct its operations.

Fluctuations in demand for, and prices of, graphite and zinc

Graphite is considered an industrial mineral, and the sales prices are not public. The price of the Company's securities, its financial results and its exploration, development and mining activities have previously been, or may in the future be, significantly adversely affected by declines in the price of graphite. Industrial mineral prices fluctuate widely and are affected by numerous factors beyond the Company's control such as the sale or purchase of industrial minerals by various dealers, interest rates, exchange rates, inflation or deflation, currency exchange fluctuation, global and regional supply and demand, production and consumption patterns, speculative activities, increased production due to improved mining and production methods, government regulations relating to prices, taxes, royalties, land tenure, land use, importing and exporting of minerals, environmental protection, the degree to which a dominant producer uses its market strength to bring supply into equilibrium with demand, and international political and economic trends, conditions and events. The prices of industrial minerals have fluctuated widely in recent years, and future price declines could cause continued exploration and development of the Company's assets to be impracticable and the Company's operations to become unprofitable.

As a significant source of the Company's revenue is the sale of zinc in separated and/or mixed form, changes in demand for, and the market price of, zinc are expected to have a significant effect on the Company's revenues and results of operations. The value and price of the Common Shares and the Company's financial results may be significantly adversely affected by declines in the prices of zinc. The price of zinc is influenced by many factors beyond the control of the Company. The level of interest rates, the rate of inflation, global

and regional consumption patterns, the world supply of and demand for zinc, including zinc's intermediate and end product uses, market behaviour of current supply sources for zinc and the variation in exchange rates can all cause significant fluctuations in prices of zinc. Such external economic factors are in turn influenced by changes in international investment patterns, monetary systems and political developments. The effect of these factors cannot be accurately predicted. The price of zinc and mineral commodities more generally has fluctuated widely in the past decade and future declines in the price of zinc received could cause commercial production to become uneconomic, thereby having a material adverse effect on the Company's business and financial condition and the value and price of the Common Shares. ESM's zinc operations were closed and placed on care and maintenance in the fall of 2008 in the face of a general economic turndown and resulting fall in zinc prices.

The Company's results of operations will also be heavily dependent on the costs of consumables, particularly fuel, energy, chemical reagents and other products which may be required to be used in future exploration, development, mining and treatment operations.

A prolonged or significant economic contraction worldwide could put further downward pressure on market prices of zinc or graphite. Protracted periods of low prices for zinc could significantly reduce revenues and the availability of required development funds in the future. This could impair asset values and reduce the Company's mineral resources. In contrast, extended periods of high commodity prices may create economic dislocations that may be destabilizing to supply and demand of zinc, graphite and ultimately to the broader markets. Strong prices for zinc or graphite may create economic pressure to identify or create alternate technologies using substitutes for zinc or graphite that ultimately could depress future long-term demand for zinc or graphite, and at the same time may incentivize development of otherwise marginal mining properties that would compete with the Company.

Ramping up mining operations

As Titan continues to ramp up and maintain production at its ESM zinc operations and the Kilbourne Project Facility, several risks remain for the Company, including: (i) Titan may encounter unforeseen obstacles or costs in operating the mine, some of which may be material and could cause Titan's estimates of time and costs to ramp up production to be significantly understated, (ii) certain lower levels of the mine are considered unsafe, (iii) some equipment may be more unreliable as operations ramp-up, and (iv) production rates and ore grades may not be as predicted. Any of these factors may adversely affect Titan's ability to ramp up or maintain production and could place Titan in a position where it has insufficient cash resources to continue mining operations, or which could result in mining operations being uneconomic. These risks will be more significant if the Company makes a decision to proceed to commercial development of its Kilbourne Project.

Limited supplies, supply chain disruptions, and inflation

The Company's exploration, development and mining activities require skilled personnel and a reliable supply of resources and consumables, including fuel, energy, reagents, equipment, spare parts and other materials. The availability of such inputs may be interrupted or constrained due to shortages, increased global demand, transportation and logistics challenges (including those associated with remote locations), labour disruptions, or government restrictions or regulations that delay or restrict the importation of necessary items.

Global supply chains have experienced, and may continue to experience, disruption as a result of geopolitical conflicts, regional instability, trade tensions, sanctions, tariffs, border controls, pandemics and other international or regional events beyond the Company's control, including the ongoing conflicts involving Ukraine, Russia, Israel, Palestine and Iran. Such disruptions may adversely affect the availability, timing and cost of critical inputs and services.

In addition, inflationary pressures may increase the cost of labour, energy, materials, equipment, transportation and services required for the Company's operations. Any interruption to the procurement and supply of resources or skilled personnel, or sustained increases in costs due to inflation or supply chain

constraints, could have an adverse impact on the Company's cash flows, results of operations and financial condition.

Risks related to future sale of graphite products

The viability of the Company's Kilbourne Project is dependent on future sales of graphite-based products. No assurance can be given that the Company will be able to sell graphite-based products at such terms and conditions as are favourable for, or necessary to sustain the operations of the Company.

The Company has not entered into any binding agreements for the sale of graphite-based products. There can be no guarantee that the Company will be able to secure sales agreements, including offtake agreements for future sales and, if so, there can be no guarantee as to the amount of purchase orders or commitments, the quantity of graphite represented by such orders and commitments or the timing for receiving same. Factors that may impact such orders and commitments include the ability of the Company to reliably and consistently produce graphite meeting client specifications and confidence of clients in such ability, market conditions and demand for products requiring graphite, overall market conditions and the strength of the economy.

If the Company, for whatever reason, is not able to produce the products in accordance with the terms and specifications of any sales agreements, such noncompliance or violation, resulting in termination or damages, may have an adverse effect on the Company's operations and financial position. Even if the Company is able to meet the requirements set out therein, there is no assurance that the contract counterparties will be willing or able to purchase the production at the prices or quantities they have agreed to in a particular offtake agreement.

Graphite supply, demand, macroeconomic conditions

Global graphite supply is concentrated in a limited number of countries, particularly China, which accounts for a substantial portion of global production. Geopolitical tensions, export restrictions, trade policies, and environmental regulations in key producing regions may disrupt supply chains, leading to price volatility and potential shortages. Additionally, the development of new graphite projects is capital-intensive and subject to permitting delays, technological challenges, and infrastructure limitations, which may constrain future supply. Given that graphite is not a publicly traded commodity like base and precious metals, and sales agreements are negotiated privately, actual sales prices may differ from the Company's assumptions. This opacity in pricing can further contribute to uncertainty in forecasting and financial performance.

The demand for graphite is influenced by several factors, including the growth of the electric vehicle (EV) and renewable energy sectors, as graphite is a critical component in lithium-ion batteries. Changes in government policies, technological advancements, or slower-than-anticipated adoption of EVs and energy storage systems could reduce graphite demand. Conversely, rapid adoption could drive increased competition for graphite resources and escalate input costs for the Company. Additionally, a limited number of existing producers may seek to protect their market position by increasing production capacity or lowering prices, which could create competitive pressures and impact the Company's ability to secure favorable sales agreements.

Broader economic conditions, including inflation, currency fluctuations, and global economic slowdowns, could impact graphite prices and availability. Economic uncertainty or recessions may reduce industrial activity and the demand for graphite across multiple sectors, while inflationary pressures could increase operational costs and capital expenditures. Furthermore, global supply chain disruptions stemming from pandemics, natural disasters, or geopolitical conflicts may affect the availability and cost of graphite. Foreign currency fluctuations may also influence the cost structure and profitability of graphite operations, particularly when sales agreements are denominated in foreign currencies.

Factors such as foreign currency fluctuation, supply and demand, industrial disruption and actual graphite market sale prices could have an adverse impact on operating costs and stock market prices and on the Company's ability to fund its activities. In each case, the economics of the Kilbourne Project could be materially adversely affected, even to the point of being rendered uneconomic.

Geopolitical tensions in the Middle East and related market instability

Ongoing and escalating geopolitical tensions in the Middle East, including the current conflict involving Iran and related regional developments, have contributed to heightened volatility in global financial, commodity and energy markets. Any further escalation of such conflict, expansion to additional countries, or involvement of global powers could adversely affect international trade, capital markets, investor confidence and global economic conditions.

Instability arising from geopolitical conflict may result in disruptions to energy markets, increased commodity price volatility, inflationary pressures, higher interest rates, supply chain interruptions and increased costs of financing. Such conditions could adversely affect the Company's ability to raise capital on acceptable terms, increase operating and capital costs, and negatively impact market valuations of mining companies generally, regardless of the Company's underlying operating performance.

While the Company does not have operations in the Middle East, the indirect effects of regional conflict and related global market instability could have a material adverse effect on the Company's business, financial condition, results of operations and prospects.

The Company's current production projections and cost estimates for ESM's zinc operations may prove to be inaccurate

A reduction in the amount of, or a change in the timing of, the zinc production as compared to the Company's current projections for ESM's zinc operations may have a material adverse impact on the Company's anticipated future cash flows. The actual effect of such a reduction of the Company's cash flow from operations would depend on the quantity and timing of any such changes in production and on actual prices and costs. A change in the timing of these projected cash flows due to production shortfalls or labour disruptions would result in delays in receipt of such cash flows and in using such cash to fund operating activities and, as applicable, reduce debt levels or fund capital expenditures. This could result in the Company being required to raise additional equity capital or incur additional indebtedness to finance capital expenditures in the future.

The level of production and capital and operating cost estimates which are used for determining and obtaining financing and other purposes are based on certain assumptions and are subject to considerable uncertainties. Actual results of operations at ESM's zinc operations are likely to differ from the Company's current estimates, and these differences may be significant. Moreover, experience from actual mining or processing operations may identify new or unexpected conditions that could decrease production below, and/or increase capital and/or operating costs above, the current estimates. If actual results are less favourable than the Company currently estimates, the Company's business, results from operations, financial condition and liquidity could be materially adversely affected.

Profitability of the Company

There can be no assurance that the Company's business and strategy will enable it to become profitable or sustain profitability in future periods. The Company's future operating results will depend on various factors, many of which are beyond the Company's direct control, including the Company's ability to develop its mining projects and commercialize its mineral resources, its ability to control its costs, the demand and price

for graphite or zinc, and general economic conditions. If the Company is unable to generate profits in the future, the market price of the Common Shares could decline.

Mining is inherently risky and subject to conditions or events beyond the Company's control

The development and operation of a mine or mine property is inherently dangerous and involves many risks that the Company may not be able to overcome, including:

- unusual or unexpected geological formations;
- metallurgical and other processing problems;
- metal losses;
- environmental hazards;
- power outages;
- labour disruptions;
- industrial accidents;
- periodic interruptions due to inclement or hazardous weather conditions;
- flooding, explosions, fire, rockfalls, rockbursts, cave-ins and landslides;
- ground or soil conditions including seismic activity;
- mechanical equipment and facility performance problems;
- poor ventilation in all or part of ESM; and
- the availability of materials and equipment.

These risks could result in damage to, or destruction of, mineral properties, production facilities or other properties, personal injury or death, including to the Company's employees, environmental damage, delays in mining, increased production costs, asset write downs, monetary losses and legal liability. The Company may not be able to obtain insurance to cover these risks at economically feasible premiums, or at all, or it may choose not to insure against these risks. Insurance against certain environmental risks, including potential liability for pollution and other hazards as a result of the disposal of waste products occurring from production, is not generally available to companies in the mining industry. The Company may suffer a material adverse effect on its business if the Company incurs losses related to any significant events that are not covered by the Company's insurance policies.

Mineral resource calculations are only estimates based on interpretation and assumptions

Any figures presented for mineral resources will only be estimates. There is a degree of uncertainty attributable to the calculation of mineral resources. Until mineralized material is actually mined and processed, the quantity of metal and grades must be considered as estimates only and no assurances can be given that the indicated levels of metals will be recovered. In making determinations about whether to advance any of its projects to development, the Company must rely upon such estimated calculations as to the mineral resources and grades of mineralization on its properties.

The estimation of mineral resources is a subjective process that relies on the judgment of the persons preparing the estimates. The process relies on the quantity and quality of available data and is based on knowledge, mining experience, analysis of drilling results and industry practices. Estimates made at a given time may significantly change when new information becomes available. By their nature, mineral resource estimates are imprecise and depend, to a certain extent, upon analysis of drilling results and statistical inferences that may ultimately prove to be inaccurate.

Estimated mineral resources may have to be recalculated based on changes in mineral prices, further exploration or development activity or actual production experience. This could materially and adversely affect estimates of the volume or grade of mineralization, estimated recovery rates or other important factors that influence mineral resource estimates. The extent to which mineral resources may ultimately be reclassified as mineral reserves is dependent upon the demonstration of their profitable recovery. Any

material changes in mineral resource estimates and grades of mineralization will affect the economic viability of placing a property into production and a property's return on capital. The Company cannot provide assurance that mineralization can be mined and processed profitably.

The Company's mineral resource estimates have been determined and valued based on assumed future prices, cut-off grades and operating costs that may prove to be inaccurate. Extended declines in market price for zinc or graphite may render portions of the Company's mineralization uneconomic and result in a reduction in reported mineral resources, which in turn could have a material adverse effect on the Company's results of operations, financial condition or the market price of the Common Shares. The Company cannot provide assurance that mineral recovery rates achieved in small scale tests will be duplicated in large scale tests under on-site conditions or in production scale. In addition, if the Company's projects produce concentrate for which there is no market, this may have an impact on the economic model for ESM.

Production based on mineral resources

The Company based its production decision for its ESM zinc operations and its Kilbourne Project Facility on the results of a preliminary economic assessment and not on a feasibility study of mineral reserves demonstrating economic and technical viability, and as a result there is increased uncertainty and there are multiple technical and economic risks of failure which are associated with this production decision. These risks, among others, include areas that would be analysed in more detail in a feasibility study, such as applying deeper economic analysis to mineral reserves and mineral resources, more detailed metallurgy and a number of specialized studies in areas such as mining and recovery methods, market analysis, and environmental and community impacts.

Uncertainty exists related to inferred mineral resources

There is a risk that inferred mineral resources referred to in the ESM Technical Report cannot be converted into measured or indicated mineral resources as there may be limited ability to assess geological continuity. Due to the uncertainty related to inferred mineral resources, there is no assurance that inferred mineral resources will be upgraded to mineral resources with sufficient geological continuity to constitute mineral reserves as a result of continued exploration and economic evaluation.

Need for Mineral Resources

As mines have limited lives based on Mineral Resources, the Company must continually develop, replace and expand its mineral resources as its mines produce zinc or graphite concentrates. The Company's ability to maintain or increase its annual production and its aggregate mineral resources will be significantly dependent on its ability to expand its mineral resources base both at its existing mines and new mines it intends to bring into production in the future.

Construction and Commissioning of Processing and Demonstration Facilities

The design and construction of efficient processing and demonstration facilities, such as the Kilbourne Project Facility, the cost and availability of suitable machinery, supplies, equipment and skilled labor, the existence of competent operational management and prudent financial administration, as well as the availability and reliability of appropriately skilled and experienced employees can affect successful project development.

Commissioning of the Company's Kilbourne Project Facility is ongoing. It is common in new processing facilities to experience unexpected problems and delays during start-up and commissioning activities. The costs, timing and complexities of commissioning the Kilbourne Project Facility may be significantly higher than anticipated which can add to the cost of development, production and operation and/or impair production and activities.

Title

There is no guarantee that the Company's title to its properties will not be challenged or impugned. The Company's claims may be subject to prior unregistered agreements or transfers and title may be affected by unidentified or unknown defects. If title to the Company's properties is disputed, it may result in the Company paying substantial costs to settle the dispute or clear title and could result in the loss of the property, which events may affect the economic viability of the Company.

Surface Access

In some cases, the Company has ownership title or leasehold rights only to the minerals of certain properties (the mineral estate), while other parties own the non-mineral or surface rights of the properties (the surface estate). In such cases, the Company has the legal right to access the property, and conduct activities on the property to the fullest extent necessary to realize its rights to the mineral estate, subject only to an obligation to avoid unreasonably impacting the surface estate and the activities of owners of the surface estate, and with due regard to their physical safety. Nonetheless, the owners of the surface estate may prove unwilling to coordinate with the Company regarding the timing and other parameters of the Company's access and activities on the property or may obstruct the Company's representatives while they are on the property. In addition, the owners of the surface estate may use or allow others to use the property for hunting or other activities that risk the safety of the Company's representatives while they are on the property. Such factors could delay or otherwise hinder the Company's ability to realize its rights to the mineral estate and give rise to legal claims.

The Company may experience difficulty attracting and retaining qualified management and employees to sustain and grow its business

The Company is dependent on the services of key executives and its skilled employees to advance its corporate objectives and to identify new opportunities for growth and funding. The loss of any executive of the Company and the Company's inability to attract and retain a suitable replacement, or additional highly skilled employees required for the Company's activities, would have a material adverse effect on the Company's business and financial condition.

Competition

The Company competes with other mining companies, many of which are better capitalized, have greater financial resources, operational experience and technical capabilities or are further advanced in their development or are significantly larger and have access to mineral reserves, for the acquisition of mineral claims, leases and other mineral interests as well as for the recruitment and retention of qualified employees and other personnel. If the Company requires and is unsuccessful in acquiring additional mineral properties or qualified personnel, the Company will not be able to grow at the rate it desires, or at all.

Significant governmental regulations

The Company's mining activities are subject to extensive federal, state and local laws, regulations and policies governing various matters, including:

- environmental protection, including regulations with respect to processing concentrates;
- the management and use of toxic substances and explosives;
- the management of natural resources and land;
- the exploration of mineral properties;
- exports;
- price controls;
- taxation and mining royalties;
- labour standards and occupational health and safety, including mine safety; and

- historic and cultural preservation.

Failure to comply with applicable laws and regulations may result in civil or criminal fines or penalties or enforcement actions, including orders issued by regulatory or judicial authorities enjoining or curtailing operations or requiring corrective measures, installation of additional equipment or remedial actions, any of which could result in significant expenditures. The Company may also be required to compensate private parties suffering loss or damage by reason of a breach of such laws, regulations or permitting requirements. It is also possible that future laws and regulations, or more stringent enforcement of current laws and regulations by governmental authorities, could cause the Company to incur additional expenses or capital expenditure restrictions, or suspensions of the Company's activities and delays in the exploration and development of its properties.

Market events and general economic conditions

Adverse events in global financial markets can have profound impacts on the global economy. Many industries, including the mining industry, are affected by these market conditions. Some of the key effects of the financial market turmoil experienced over the past decade include contraction in credit markets resulting in a spread of credit risk, devaluations, high volatility in global equity, commodity, foreign exchange and precious metal markets, and a lack of market liquidity. A continued or worsened slowdown in the financial markets or other economic conditions, including but not limited to, consumer spending, employment rates, business conditions, inflation, fuel and energy costs, consumer debt levels, lack of available credit, the state of the financial markets, interest rates and tax rates, may adversely affect the Company's growth and profitability, financial liabilities and results of operations.

Environmental laws and regulations (including in respect of climate change)

All of the Company's exploration, development and production activities are subject to regulation by governmental agencies under various environmental laws. These laws address emissions into the air, discharges into water, management of waste, management of hazardous substances, protection of natural resources, antiquities and endangered species, reclamation of lands disturbed by mining operations and climate change. Environmental legislation is evolving, and the general trend has been towards stricter standards and enforcement, increased fines and penalties for non-compliance, more stringent environmental assessments of proposed projects and increasing responsibility for companies and their officers, directors and employees. Compliance with environmental laws and regulations may require significant capital outlays on the Company's behalf and may cause material changes or delays in the Company's intended activities. Future changes in these laws or regulations could have a significant adverse impact on some portion of the Company's business, requiring the Company to re-evaluate those activities at that time. Non-compliance thereof may result in significant penalties, fines and/or sanctions imposed on the Company by the relevant environmental regulatory authority resulting in a material adverse effect on the Company's reputation and results of its operations.

Threat of legal proceedings

Due to the nature of its business, the Company may be subject to numerous regulatory investigations, civil claims, lawsuits and other proceedings in the ordinary course of its business. The results of these legal proceedings cannot be predicted with certainty due to the uncertainty inherent in litigation, the difficulty of predicting decisions of regulators, judges and juries and the possibility that decisions may be reversed on appeal. The Company's efforts to respond to the legal proceedings could result in a diversion of management time and attention from revenue-generating activities. There can be no assurances that these matters will not have a material adverse effect on the Company's business. See "*Title*" above.

Rights, concessions and permits

The Company's current and anticipated future operations, including further exploration, development and production on its mineral properties, including ESM's zinc operations and the Kilbourne Project, require concessions and permits from various governmental authorities.

Obtaining or renewing governmental concessions and permits is a complex and time-consuming process. The duration and success of efforts to obtain and renew permits are contingent upon many variables not within the Company's control. The Company cannot provide assurance that all rights, concessions and permits that it requires for its operations will be obtainable or renewable on reasonable terms, or at all. Delays or a failure to obtain or renew such required concessions and permits, or the expiry, revocation or failure to comply with the terms of any such concessions and permits that the Company has obtained, would adversely affect the Company's business.

Social and environmental activism can have a negative effect on exploration, development and mining activities

There is an increasing level of public concern relating to the effects of mining on the natural landscape, on communities and on the environment. Certain non-governmental organizations, public interest groups and reporting organizations ("**NGOs**") who oppose resource development can be vocal critics of the mining industry. In addition, there have been many instances in which local community groups have opposed resource extraction activities, which have resulted in disruption and delays to the relevant operation. Local communities in St. Lawrence County, NGOs or local community organizations could direct adverse publicity and/or disrupt the operations of the Company in respect of ESM or another of the Company's properties, regardless of its successful compliance with social and environmental best practices, due to political factors, activities of unrelated third parties on lands in which the Company has an interest or the Company's operations specifically. Any such actions and the resulting media coverage could have an adverse effect on the reputation and financial condition of the Company or its relationships with the communities in which it operates, which could have a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects.

Land reclamation requirements for the Company's properties may be burdensome

Land reclamation requirements are generally imposed on companies with mining operations or mineral exploration companies in order to minimize long term effects of land disturbance. Reclamation may include requirements to:

- control dispersion of potentially deleterious effluents; and
- reasonably re-establish pre-disturbance land forms and vegetation.

In order to carry out reclamation obligations imposed on the Company in connection with exploration, development and production activities, the Company must allocate financial resources that might otherwise be spent on exploration and contemplated development programs. If the Company is required to carry out unanticipated reclamation work or provide security for further reclamation work, the Company's financial position could be adversely affected.

Tailings management facility and environmental reclamation

The embankment for the tailings management facility ("**TMF**") at ESM's zinc operations will need to be raised to fully contain the estimated tonnage for ESM's zinc operations as set out in the current mine plan. The Company is not certain how the native surface of the TMF was prepared, what design features were included, what sub-surface conditions existed prior to construction or the material properties of the fill used for construction. If the Company is unable to complete the embankment raise at the TMF, or if the TMF were

to subsequently breach, the Company would be required to delay or cease operations at ESM's zinc operations for a significant period of time. This may also necessitate extensive response and rehabilitation activities. The Company may not receive approvals and consents necessary to proceed with the remaining rehabilitation plans in a timely manner. The Company cannot anticipate the timing and amount of the costs and the liabilities relating to any such TMF failure, or whether such failure would result in the Company being subject to regulatory charges or claims, fines and penalties or the potential quantum thereof.

Insurance

The Company's operations are subject to numerous risks and hazards. Such risks could result in personal injury, environmental damage, damage to and destruction of the facilities, delays in production and liability. For some of these risks, the Company maintains insurance to protect against these losses at levels consistent with industry practice. However, the Company may choose not to insure certain risks or may not be able to maintain current or desired levels of insurance coverage, particularly if there is a significant increase in the cost of premiums. The Company's current policies may not cover all losses and the Company currently does not have specific coverage for environmental risk. Moreover, in the event that the Company is unable to fully pay for the cost of remedying damages, particularly environmental problems, the Company might be required to suspend or significantly curtail its activities or enter into other interim compliance measures.

Health & safety

Mining, like many other extractive natural resource industries, is subject to potential risks and liabilities due to accidents that could result in serious injury or death. The impact of such accidents could affect the profitability of the operations, cause an interruption to operations, lead to a loss of licenses, affect the reputation of the Company and its ability to obtain further licenses, damage community relations and reduce the perceived appeal of the Company as an employer.

There is no assurance that the Company has been or will at all times be in full compliance with all laws and regulations or hold, and be in full compliance with, all required health and safety permits. The potential costs and delays associated with compliance with such laws, regulations and permits could prevent the Company from proceeding with the development of a project or the operation or further development of a project, and any non-compliance therewith may adversely affect the Company's business, financial condition and results of operations.

Amendments to current laws, regulations and permits governing operations and activities of mining companies, or more stringent implementation thereof, could have a material adverse impact on the Company and cause increases in exploration expenses, capital expenditures or production costs, reduction in levels of production at producing properties, or abandonment or delays in development of new mining properties.

The Company is dependent on information technology systems

The Company's operations depend, in part, upon information technology systems. The Company's cybersecurity risk management and strategy processes for assessing, identifying, and managing material risks from cybersecurity threats are managed by members of our management team, primarily our SVP Corporate Affairs. Cybersecurity incidents are to be immediately reported to the Company's management team for resolution with outsourced information technology support team. Information technology controls are included with management's testing of internal control over financial reporting. The Company's information technology systems are subject to disruption, damage or failure from a number of sources, including, but not limited to, computer viruses, security breaches, natural disasters, power loss and defects in design. Although to date the Company has not experienced any material losses relating to information technology system disruptions, damage or failure, there can be no assurance that it will not incur such losses in future. Any of these and other events could result in information technology systems failures, operational delays, production downtimes, destruction or corruption of data, security breaches or other manipulation or improper use of the

Company's systems and networks, any of which may result in a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects.

Fixed Zinc Pricing Arrangements and Other Pricing Hedges

The Company may from time to time enter into fixed zinc pricing arrangements or other hedges in respect of a material amount of its forecasted zinc production. The use of these arrangements involves certain inherent risks including the risk of default on amounts owing to the Company by the counterparties with which the Company has entered into such transactions. In the event that such risks materialize, the Company's future cash flows, profitability, results of operations and financial condition could be materially and adversely affected.

Conflicts of interest

Certain of the Company's directors also serve or may serve as directors or officers of, or have significant shareholdings in, other companies involved in natural resource exploration, development and production or mining-related activities, including in other companies involved in the exploration, development and production of zinc. To the extent that such other companies may participate in ventures in which the Company may participate, or in ventures which the Company may seek to participate in, the Company's directors and officers may have a conflict of interest in negotiating and concluding terms respecting the extent of such participation. In all cases where the Company's directors and officers have an interest in other companies, such other companies may also compete with the Company for the acquisition of mineral property investments. Such conflicts of the Company's directors and officers may result in a material and adverse effect on the Company's profitability, results of operation and financial condition. As a result of these conflicts of interest, the Company may miss the opportunity to participate in certain transactions, which may have a material adverse effect on the Company's financial position.

Risks inherent in acquisitions

The Company may actively pursue the acquisition of exploration, development and production assets consistent with its acquisition and growth strategy. From time to time, the Company may also acquire securities of or other interests in companies with respect to which it may enter into acquisitions or other transactions. Acquisition transactions involve inherent risks, including but not limited to:

- accurately assessing the value, strengths, weaknesses, contingent and other liabilities and potential profitability of acquisition candidates;
- ability to achieve identified and anticipated operating and financial synergies;
- unanticipated costs;
- diversion of management's attention from existing business;
- potential loss of the Company's key employees or key employees of any business acquired;
- unanticipated changes in business, industry or general economic conditions that affect the assumptions underlying the acquisition; and
- decline in the value of acquired properties, companies or securities.

Any one or more of these factors or other risks could cause the Company not to realize the anticipated benefits of an acquisition of properties or companies, and could have a material adverse effect on its financial condition.

Labour and employment retention relations

Production at ESM's zinc operations and the Kilbourne Project will be dependent upon the ability of the Company to hire qualified employees and to maintain good relations with its employees. In addition, relations between the Company and its employees may be impacted by changes in the scheme of labour relations which

may be introduced by the relevant governmental authorities in the United States. Adverse changes in such legislation or in the relationship between the Company and its employees or the ability to attract employees may have a negative impact on the Company's business, results of operations and financial condition.

Anti-corruption and bribery regulation, including the Canadian Extractive Sector Transparency Measures Act ("ESTMA") reporting

The Company is required to comply with anti-corruption and anti-bribery laws in Canada and the United States. In recent years, there has been a general increase in both the frequency of enforcement and the severity of penalties under such laws, resulting in greater scrutiny and punishment of companies convicted of violating anti-corruption and anti-bribery laws. Furthermore, a company may be found liable for violations by not only its employees, but also by its contractors and third-party agents. Although the Company has adopted a Code of Conduct that addresses these matters, no assurance can be given that the Company, or its employees, contractors or third-party agents will comply strictly with such laws. If the Company is the subject of an enforcement action or in violation of such laws, it may result in significant penalties, fines and/or sanctions imposed on the Company resulting in a material adverse effect on the Company's reputation and results of its operations.

In addition, ESTMA requires public disclosure of payments to governments by mining and oil and gas companies engaged in the commercial development of oil, gas and minerals who are either publicly listed in Canada or with business or assets in Canada. Mandatory annual reporting is required for extractive companies with respect to payments made to foreign and domestic governments at all levels, including entities established by two or more governments, and including aboriginal groups. ESTMA requires reporting on the payments of any taxes, royalties, fees, production entitlements, bonuses, dividends, infrastructure improvement payments, and any other prescribed payment over C$100,000. Failure to report, false reporting or structuring payments to avoid reporting may result in fines of up to C$250,000 (which may be concurrent). The Company commenced reporting in 2017. If the Company finds itself subject to an enforcement action or in violation of ESTMA, this may result in significant penalties, fines and/or sanctions imposed on the Company resulting in a material adverse effect on its reputation.

Infrastructure

Mining, processing, development and exploration activities depend on the availability of adequate infrastructure. Reliable roads, bridges and power sources are important factors that affect capital and operating costs. Sabotage, government or other interference in the maintenance or provision of such infrastructure could adversely affect the Company's operations, financial condition and results of operations.

Enforceability of judgments

Certain directors of the Company reside outside of Canada. As a result, holders of Common Shares may not be able to effect service of process within Canada to such directors, or to enforce Canadian court judgments obtained against such directors in jurisdictions outside of Canada, including those predicated upon the civil liability provisions of applicable Canadian securities laws. Furthermore, it may be difficult for the holders of Common Shares to enforce, in original actions brought in courts in jurisdictions outside of Canada, liabilities predicated upon Canadian securities laws.

Global outbreaks and Coronavirus

The risk of global outbreaks has the potential to significantly and adversely impact the Company's operations and business. There can be no certainty that an outbreak of infectious illness and the restrictive measures implemented to slow the spread of the virus will not materially impact the Company's operations or personnel. It is not possible for the Company to predict the duration or magnitude of the adverse results of

the outbreak and its effects on the Company's business, results of operations or ability to raise funds at this time.

Reliance on Management and Experts

The success of the Company will be largely dependent upon the performance of its senior management and directors. Due to the relatively small size of the Company, the loss of these persons or the inability of the Company to attract and retain additional highly skilled employees may adversely affect its business and future operations. The Company has not purchased any "key-man" insurance nor has it entered into any non-competition or non-disclosure agreements with any of its directors, officers or key employees and has no current plans to do so.

Public Corporation Obligations

As a publicly listed corporate entity, the Company is subject to evolving rules and regulations promulgated by a number of governmental and self-regulated organizations, including the Canadian Securities Administrators (CSA), the TSX, the NYSE American, and the International Accounting Standards Board, which govern corporate governance and public disclosure regulations. These rules and regulations continue to evolve in scope and complexity creating many new requirements, which increase compliance costs and the risk of non-compliance. The Company's efforts to comply with these rules and obligations could result in increased general and administration expenses and a diversion of management time and attention from financing, development, operations and, eventually, revenue-generating activities.

We cannot assure you that an active market will develop for our Common Shares on the NYSE American.

Our Common Shares began trading on the NYSE American LLC (the "NYSE American") on November 20, 2025, under the symbol "TII". Prior to this listing, there had been no prior public trading market for the Common Shares on the NYSE American. We cannot assure you that our listing of the Common Shares on the NYSE American will be maintained, or that an active trading market for the Common Shares will develop on the NYSE American or elsewhere or, if developed, that any market will be sustained. Accordingly, we cannot assure you of the liquidity of any trading market, the ability for shareholders to sell Common Shares when desired or the prices that may be obtained for sales of Common Shares.

United States investors may not be able to obtain enforcement of civil liabilities against us.

The enforcement by investors of civil liabilities under the United States federal or state securities laws may be affected adversely by the fact that we are governed by the *Business Corporations Act* (British Columbia), that the majority of our officers and certain of our directors are residents of Canada or otherwise reside outside the United States, and that all, or a substantial portion of their assets are located outside the United States. It may not be possible for investors to effect service of process within the United States on certain of our directors and officers or enforce judgments obtained in the United States courts against certain of our directors and officers based upon the civil liability provisions of United States federal securities laws or the securities laws of any state of the United States.

There is some doubt as to whether a judgment of a United States court based solely upon the civil liability provisions of United States federal or state securities laws would be enforceable in Canada against our directors and officers. There is also doubt as to whether an original action could be brought in Canada against us or our directors and officers to enforce liabilities based solely upon United States federal or state securities laws.

As a foreign private issuer, we are subject to different U.S. securities laws and rules than a domestic U.S. issuer, which may limit the information publicly available to our U.S. shareholders.

We are a foreign private issuer under applicable U.S. federal securities laws and, therefore, we are not be required to comply with all the periodic disclosure and current reporting requirements of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act"), and related rules and regulations, as U.S. domestic issuers. As a result, we do not file the same reports that a U.S. domestic issuer files with the U.S. Securities and Exchange Commission (the "SEC"), although we are required to file with or furnish to the SEC the continuous disclosure documents that we are required to file in Canada under Canadian securities laws. In addition, as a foreign private issuer, we are exempt from the proxy rules under the Exchange Act. As a Canadian issuer, our insiders are also exempt under the Exchange Act Section 16 requirements applicable to insiders of foreign private issuers.

We may lose our foreign private issuer status in the future, which could result in significant additional costs and expenses to us.

In order to maintain our current status as a foreign private issuer, a majority of our Common Shares must be either directly or indirectly owned by non-residents of the United States unless we also satisfy one of the additional requirements necessary to preserve this status. We may in the future lose our foreign private issuer status if a majority of the Common Shares are held in the United States and we fail to meet the additional requirements necessary to avoid loss of foreign private issuer status. The regulatory and compliance costs to us under U.S. federal securities laws as a U.S. domestic issuer would be significantly more than the costs we incur as a Canadian foreign private issuer eligible to use the multijurisdictional disclosure system. If we are not a foreign private issuer, we would not be eligible to use the multijurisdictional disclosure system or other foreign issuer forms and would be required to file periodic and current reports and registration statements on U.S. domestic issuer forms with the SEC, which are more detailed and extensive than the forms available to a foreign private issuer. We would also lose the ability to rely upon exemptions from NYSE American corporate governance requirements that are available to foreign private issuers.

EMPIRE STATE MINE

The following information on ESM is the Summary exactly as included in and extracted from the Technical Report titled "Empire State Mines 2025 NI 43-101 Technical Report" with an effective date of December 1, 2025 (the "**ESM Technical Report**"). The ESM Technical Report is incorporated by reference herein and available on the Company's profile on SEDAR+.

1.1 Introduction

BBA USA Inc. (BBA) has been engaged by Titan Mining Corporation (Titan or the Company) to complete a Preliminary Economic Assessment (PEA) for the Kilbourne Graphite Project (Graphite Study) and update the National Instrument 43-101 (NI 43-101) Technical Report for the Empire State Mines (ESM) operation (Zinc Operation). This Technical Report summarizes the results of the PEA and was prepared following the guidelines of NI 43-101.

The Kilbourne resource represents a significant diversification of ESM's resource base beyond zinc. In addition to the graphite evaluation, the report also provides an updated zinc Mineral Resource Estimate (MRE), incorporating new data from recent diamond drilling and underground exposures since the previous technical report.

The currency in this report is United States dollars (US$), unless stated otherwise. Zinc-related operations and reporting are presented in imperial units throughout the Technical Report. For graphite-related operations, imperial units are used up to the concentrator level, consistent with site conventions. Metric units are used

for graphite concentrate reporting, including product specifications and downstream metrics. Readers should be aware of this unit transition when reviewing graphite-related sections.

1.2 Project Description

Empire State Mines, owned by Titan Mining Corporation, is located in the Balmat–Edwards–Pierrepont mining district of northern New York State, near Gouverneur and is 25 miles (mi) south of the Port of Ogdensburg. The site includes a complex of mines, including the fully developed #4 underground zinc mine and associated surface infrastructure, including a concentrator, tailings facility, and rail access.

The district is a mature zinc mining camp with production first recorded in 1915. Mining proceeded over the decades primarily as underground (UG) operations serviced by shafts and portals. ESM resumed underground zinc production in 2018 and currently operates at approximately 2,275 tons per day (ton/d), with plans to ramp up to 2,800 ton/d by 2028.

The Kilbourne Graphite Project is located within 4,000 ft of the existing mill and infrastructure underlying the Zinc Operations Tailings Management Facility (TMF).

The zinc mine is fully developed with shaft access and mobile equipment on-site. Existing surface facilities at the mine include a maintenance shop, offices, mine dry, primary crusher, mine ventilation fans, 12,000-ton covered concentrate storage building, rail siding, warehouse, and storage buildings. The mine and its facilities were maintained to good standards during the period of care and maintenance.

1.3 Location, Access, and Ownership

ESM's underground Zinc Operation and Kilbourne Graphite resource are co-located on the same property approximately 7 miles southeast of Gouverneur, New York State, in St. Lawrence County. The 2,715 acres of surface rights owned by Titan are divided among the townships of Fowler, Edwards and Pierrepont, containing 1,769, 703 and 242 acres, respectively. There are 51,428 acres of mineral rights located in St. Lawrence and Franklin Counties that are comprised of multiple individual parcels in selected areas in and around the mines.

1.4 History, Exploration, and Drilling

Zinc

The Balmat-Edwards-Pierrepont district consists of four mining regions (Balmat, Hyatt, Edwards, and Pierrepont) with production first recorded out of Edwards in 1915. Balmat operated continuously from 1930 to 2001 when production ceased due to depressed zinc metal prices. Production resumed in 2006 until Hudbay placed the Balmat mine on care and maintenance in the third quarter of 2008 in response to depressed metal prices. ESM resumed production in 2018 and has continually produced since then.

Drilling in the district has been dominantly core drilling either with contract drillers such as Cabo, Major, and Boart Longyear, or by company owned and operated drills. The drillhole database contains 12,105 surface and underground diamond drillholes.

The Balmat mine as of December 31, 2024 produced a total of 36. Mton grading 8.6% zinc. A history of property ownership is listed in Table 1-1.

Table 1-1: Ownership history

Date	Company
1930	St. Joe Minerals
1987	Zinc Corporation of America
2003	OntZinc (renamed Hudbay Minerals in December 2004)
2015	Star Mountain Resources Inc.
2017	**Titan Mining (US) Corporation**

Source: Taylor et al., 2024

Graphite

There is no history of graphite mining on the Property.

Graphite mineralization has long been documented within the Balmat-Edwards-Pierrepont district. Its occurrence has been logged as a curiosity, or defining mineralogical characteristic of geologic units within the region. Exploration activity targeting graphite began in 2022 with the sampling of five historic drillholes from the now Kilbourne Project, and three drillholes from the Company's Bostwick Creek target for graphitic carbon. In 2023, Company drilling at Kilbourne totaled 39 holes with 11,917 ft drilled.

1.5 Geology and Mineralization

Zinc

Zinc sulfide mineralization occurs within the Upper Marble, a stratigraphic unit of the Grenville Supergroup, composed of metamorphosed and complexly folded siliceous dolomitic marbles. Mineralization is concentrated primarily in the hinges of large fold structures.

The carbonate hosted ESM zinc deposits are comprised of multiple zones in and around Fowler, NY. There are ten deposits currently considered as viable economic targets; American, Cal Marble, Fowler, Mahler, Mud Pond, N2, Northeast Fowler, New Fold, Sylvia Lake, and Turnpike. Historic mining at these locations has provided a good geological understanding of each, with supporting mapping, sampling, and drilling data.

The zinc mineralization extends from the surface down to a depth of 5,700 ft below surface. The zones are aerially scattered and all zones except NE Fowler and Cal Marble are connected by existing development to the shaft. The zones range in thickness from 2 ft to 50 ft with an overall plunge between 20° to 25° with local dips ranging from 0° to 90°. The veins can display considerable geometrical variability depending on the degree of folding.

Graphite

Graphite mineralization occurs as disseminated flakes within many of the marbles and dolomites, and occurs in the highest grades in the Upper Marble Unit 2 schists with graphitic carbon content averaging around 3% graphitic carbon. The Kilbourne graphite deposit footprints are up to 500 ft wide and 9,000 ft long.

1.6 Metallurgical Testing and Mineral Processing

Zinc

A test program was undertaken in 2005 to confirm the processing requirements of selected mineralized

material zones from the ESM mine. These mineralized material zones were selected based on projected tonnage, mineralized material type, and sample availability. The results were used to confirm concentrate grades and recoveries for the re-start of operations in 2005.

Flotation tests were completed under the guidance of Fred Vargas, the metallurgical consultant who developed the pHLOTEC flotation process in use at ESM since 1984.

The 2005 metallurgical test results, and operational results from 2006 to 2008, support a zinc recovery of 96% and a zinc concentrate grade of 56% for the UG operations. Currently, the concentrator is producing zinc concentrate at an average of 60% zinc with 3% iron and 0.50% magnesium.

While lead occurs at low grades in the historic #2 Mine, economic lead recovery is not viable, and ESM does not recover lead.

Graphite

Mineralogical characterization and metallurgical testing were performed on samples from the Kilbourne Graphite Study (Kilbourne Study).

Optical microscopy of the samples showed that graphite was acicular to prismatic, and platy in habit. It ranged from <50 µm as individual flakes to 1.5 mm in size as polycrystalline clusters. Graphite was generally finer-grained in the low-grade samples and coarser in the higher-grade samples.

Flotation process development conducted at SGS on a sample grading 1.67% Cg culminated in a flowsheet and conditions that produced a final concentrate grading 97.4% TC. The graphite concentrate was classified as finer grained with less than 8% of the concentrate mass reporting to the +100 mesh size fractions. It is noteworthy that even the smallest size fraction of -200 mesh produced a very high total carbon content of 97.4% TC.

Forte Analytical conducted a testwork program on two composites grading between 2.4% and 2.5% Cg. The focus of the test program was to produce a concentrate grading at least 95% TC while minimizing flake degradation. The optimized flowsheet and conditions produced an upgraded flash concentrate grading 98.3% TC with 21.4% of the concentrate mass reporting to the +100 mesh size fractions. The flash concentrate accounted for only 50-60% of the contained graphite and a global concentrate product including the upgraded rougher concentrate was not characterized.

A second test program conducted by SGS subjected a Master composite and four variability composites to high-level optimization work. The test program produced final concentrate grades of at least 97.6% TC with open circuit graphite recoveries between 85.6% and 94.6%. Closed-circuit recovery will increase due to cycling of intermediate tailings streams. For design purposes, a closed-circuit graphite recovery of 90% is recommended.

While the execution of the test programs conducted by SGS and Forte Analytical varied significantly, the results are consistent. Both programs determined that the flake size distribution in the Kilbourne mineralization is relatively fine but upgraded readily to very high concentrate grades well above 95% TC.

A review of the drillhole data revealed that the material between the upper and lower zones is almost barren. Sensor-based material sorting may be an effective technology to reject the barren material, thus upgrading the average mill feed noticeably. Hence, material sorting will be explored in the next phase of testing, which could significantly increase the mill head grade.

1.7 Mineral Resource Estimates

Zinc

Drillhole Database

The drillhole database was exported as CSV files for the resource updates. Assays and associated composites were extracted from drillholes that were used in estimation, of which there were 1,321 in total.

As of November 7 2025, the complete database for ESM consists of 12,105 diamond drillholes. Smaller subsets of this database were used for geologic modeling and/or estimation on a lithological unit basis. Each lithological group was modeled separately in isolated geological and estimation projects.

Geologic Model

Ten zones were defined and modeled by ESM geologists. Each one is comprised of multiple veins designating variably oriented and spatially-distinct mineralized zones, which were modeled using implicit methods. Input data for these models are based on drilling intercepts and years of surface and underground mapping.

All modeling at ESM since 2019 has been conducted in Leapfrog Geo™ and updated as new information has become available as needed on an annual basis (Table 1-2). The 2025 model updates were completed in version 2024.1.3. Each zone has been analyzed and divided where appropriate to facilitate a more accurate estimation of the grade. In some cases, this has resulted in splitting of domains based on morphology or orientation for the purposes of estimation.

Table 1-2: Update periods, model methodology, and volumes

Zone	Modeling Method	Years Modeled and Updated	Model Volumes (ft^3)
American	Implicit vein model	2019	4,586,000
Cal Marble	Implicit vein system model	2009, 2017, 2019, 2024	5,206,900
Fowler	Implicit vein system model	2019, 2023	2,598,000
Mahler	Implicit vein model; indicator RBF interpolant	2009, 2017, Annually 2019 - 2025	19,400,000
Mud Pond	Implicit vein system model	2008, 2009, 2017, Annually 2019 - 2025	15,463,500
N2D	Implicit vein system model; indicator RBF interpolant	2019, 2021, 2022, 2023	22,420,000
New Fold	Implicit vein system model; indicator RBF interpolant	2009, 2017, Annually 2020 - 2025	9,553,100
Northeast Fowler	Implicit vein model	2017, 2019	6,852,600
Sylvia Lake	Implicit vein system model	2017, 2019, 2024	7,102,000
Turnpike	Indicator RBF interpolant	2019, 2021, 2022, 2023	65,041,000

Block Model

Separate block models were created for each zone. The parameters for each consist of origins, rotations (in Leapfrog rotation convention), parent block parameters and associated sub-block parameters. The American

and Northeast Fowler block models were created in Vulcan and have parameters consistent with Vulcan conventions.

Historical mine workings, or as-built solids, were used for sub-blocking during model creation and mined blocks contained in these wireframes were removed from the estimated material. A comprehensive as-built wireframe was updated and used to deplete tonnage within the block models.

Due to the high variability of the ESM deposits and the lack of robust variography, inverse distance squared estimates were used to estimate grades into parent blocks within the block model. The control of each estimate was based on sample selection criteria such as minimum and maximum number of composites, minimum number of drillholes, and search distances. For each pass, the search distances were either isotropic (spherical) or anisotropic (ellipsoidal) depending on the geometric control and limits in each vein. For isotropic searches, the geometry of the vein was considered adequate to control sample selection. For anisotropic searches, the direction was defined using a variable orientation algorithm in Leapfrog EDGE called Variable Orientation (VO) or in Vulcan called Locally Varying Anisotropy (LVA). This oriented the search ellipse for each block down a plane which paralleled the modeled geologic continuity (i.e., the hanging wall or footwall of the ESM veins). The VO and LVA parameters were defined within the estimator based on the modeled vein surfaces.

The Underground and Open Pit Zinc Mineral Resources were modeled using Leapfrog Geo™ (version 2024.1.3) and estimated in Leapfrog Edge. The QP, Don Taylor, has reviewed the geological models and estimation results through site visits and remote sessions, assessed the methodologies and outcomes for consistency with industry standards, and is satisfied that the work is reasonable and suitable for reporting Mineral Resources.

Mineral Resources for the underground #4 Mine areas have been compiled from ten separate block models including the American, Cal Marble, Fowler, Mahler – Lower, Mahler - Upper, Mud Pond, N2D, New Fold, Northeast Fowler and Silvia Lake areas (Table 1-3).

Table 1-3: Underground Mineral Resource Estimate as of June 9, 2025

Category	Tons (000's US short tons)	Zn (%)	Contained Pounds (M lb)
Measured	282	17.3	97
Indicated	1,133	16.0	362
Measured + Indicated	1,415	16.2	459
Inferred	4,512	12.1	1,088

Notes:

1. The qualified person for the 2025 MRE, as defined by the NI 43-101 guidelines, is Donald (Don) R. Taylor, of Titan Mining Corp., SME registered member (#4029597).
2. 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.
3. 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 2025 underground MRE encompasses 41 vein domains and 6 indicator RBF interpolant shells totaling 45 individual wireframes.
4. Geological and block models for the underground MRE used data from a total of 1,153 surface and underground diamond drillholes (core). The drillhole 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 Mines personnel.

5. 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.
6. The MRE was compiled from 11 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-ft run-length composites with residuals less than 5 ft 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 modeled vein surfaces.
7. 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.
8. 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%.
9. Resources stated as in situ grade at a Zinc price of $1.30/lb.
10. 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.
11. Quantities and grades in the MRE are rounded to an appropriate number of significant figures to reflect that they are estimations.
12. The Mineral Resource Estimate was prepared following the CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (November 29, 2019).
13. CIM definitions and guidelines for Mineral Resource Estimates have been followed.
14. The QP is unaware of any known environmental, permitting, legal, title-related, taxation, socio-economic, marketing, or political issues or any other relevant issues that could materially affect this MRE.

The Open Pit Mineral Resource reported is effective as of October 17, 2024, and has been tabulated at a pit-constrained COG of 0.6%. Table 14-11 summarizes the parameters used to develop the constraining pit to determine a reasonable prospect for eventual economic extraction (RPEEE). The open pit is considered an accretive project with no G&A costs, and selling costs are incorporated into the selling price. The QP has reviewed these assumptions and considers them reasonable for the purposes of this Mineral Resource Estimate. The pit-constrained Mineral Resource and in situ metal for Turnpike is summarized in (Table 1-4).

Table 1-4: Turnpike Open Pit Mineral Resource Estimate as of October 17, 2024

Category	Tons (000's US short tons)	Zn (%)	Contained pounds (000's lb)
Measured	251	3.1	15,679
Indicated	950	3.2	61,088
Measured + Indicated	1,201	3.2	76,767
Inferred	461	3.5	32,360

Source: Taylor et al., 2024

Notes:

1. The qualified person for the 2024 MRE, as defined by the NI 43-101 guidelines, is Donald (Don) R. Taylor, of Titan Mining Corp., SME registered member (#4029597).
2. 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.
3. 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 Open Pit MRE encompasses three vein domains and nine indicator RBF interpolant shells totaling 12 individual wireframes.
4. Geological and block models for the Open Pit MRE used data from a total of 254 surface and underground diamond drillholes (core). The drillhole 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 Mines personnel.
5. 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.
6. The Open Pit MRE was compiled from a single block model that was prepared using Leapfrog Edge. The block model was sub-blocked at domain boundaries and samples were composited within the indicator RBF interpolant models as 10-ft run-length composites with residuals less than 5 ft added to the prior interval, honoring the modeled geological boundaries. Assays were composited within the vein models using vein length intervals where a single composite is generated for each complete vein intersection with a drillhole. Grade estimation was carried out using IDW methods coupled with variably orientated search ellipses derived from modeled trend surfaces.
7. The 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.
8. Resources stated as internal to an optimized pit shell, above a cut-off grade of 0.6% Zn.
9. The cut-off is based on break-even economics at a Zinc price of $1.27/lb, with an assumed zinc recovery of 96%, and actual processing, mining, and transportation costs from the ESM operation. No G&A costs were applied as ESM considers the Project accretive. No extra mining dilution was added as a regularized block model was used.
10. 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.
11. Quantities and grades in the MRE are rounded to an appropriate number of significant figures to reflect that they are estimations.
12. The Mineral Resource Estimate was prepared following the CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (November 29, 2019).

13. CIM definitions and guidelines for Mineral Resource Estimates have been followed.
14. The QP is unaware of any known environmental, permitting, legal, title-related, taxation, socio-economic, marketing or political issues or any other relevant issues that could materially affect this MRE.

Graphite

Drill Database

The Kilbourne Graphite Study database totals 45 surface-collared diamond drillholes (DDH) and one surface channel, totaling 29,699 ft used for modeling Kilbourne. There are a total of 3,396 assay records in the Kilbourne database, of which 2,088 assay records for graphite (%Cg).

Geology Model

Three-dimensional (3D) wireframe models of mineralization were developed in Leapfrog Geo™ version 2023.2.3 (Leapfrog) by ESM and reviewed by the QP. The wireframes were based on the geological interpretation of the logged lithology and sub-domained based on contiguous grade intervals greater than or less than 0.50% Cg within the Upper Marble #2 (UM2) formation, defining the Upper, Middle, and Lower sub-domains of UM2 (210, 220, 230). Contiguous grade intervals greater than or equal to 0.50% Cg were modeled within the higher-grade 210 and 230 sub-domains (UM2 – Upper and Lower, respectively), while contiguous grade intervals less than 0.50% Cg were modeled as the 220 sub-domain (UM2 – Middle). These 200 series domains form the basis of the Kilbourne Mineral Resource Estimate.

The wireframe solids were imported from Leapfrog into Datamine Studio RM™ version 2.1.125.0 (Datamine) in .dwg format. The solids were validated within Datamine. The modeling is broken down into twelve separate geological domains based on lithology

The wireframes extend at depth, below the deepest DDH. This is to provide a target for future exploration. The block model extents did not encompass the entire wireframe extents to reduce block model and file sizes. As such the volumes related to the block model may significantly differ in comparison to the wireframe volumes. The volumes were validated with an initial block fill of the entire wireframes and no significant discrepancies were noted.

Block Model

Block modeling was completed in Datamine using industry accepted standard practices. The geological model wireframes were filled with parent block 30’ x 30’ x 15’ and sub-celled to fill the volumes.

Drillhole sample intervals were assigned to the appropriate mineral domain. Geostatistical analysis was completed on each mineral domain for grade capping, compositing, and spatial analysis.

Grades were estimated into the model using a three-pass estimation requiring a minimum and maximum number of samples to estimate a block. Table 1-5 summarizes the pit constrained Mineral Resource using a 1.5% Cg cut-off grade.

Table 1-5: Kilbourne Graphite Mineral Resource summary and in situ metal within pit shells

Classification	Deposit	Cut-Off Grade (% Cg)	Tonnage ('000 ton)	Grade (% Cg)	Contained Graphite ('000 ton)
Inferred	Kilbourne	1.50	22,423	2.91	653

Source: Taylor et al., 2024

Notes:

1. The independent qualified person for the 2024 MRE, as defined by NI 43-101, is Mr. Todd McCracken (PGO 0631) of BBA USA Inc. The effective date of this Mineral Resource Estimate is December 3, 2024.
2. Three-dimensional (3D) wireframe models of mineralization were based on the geological interpretation of the logged lithology and sub-domained based on contiguous grade intervals greater than or less than 0.50% Cg defining two mineralized sub-domains.
3. Geological and block models for the Mineral Resource Estimate used data from a total of 45 surface diamond drillholes (core) and one surface channel sample. The drillhole 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 Mines personnel.
4. Quantities and grades in the Mineral Resource Estimate are rounded to an appropriate number of significant figures to reflect that they are estimations.
5. The Mineral Resource Estimate was constrained using the following optimization parameters, as agreed upon by Empire State Mines and the QP. The parameters include mining costs of $4.60/ton for mineralized rock, $3.50/ton for unmineralized rock, and $2.00/ton for overburden and tailings, with a 5.0% dilution and 95.0% mining recovery. Processing costs are $14.00/ton milled, with a 91.0% processing recovery and a concentrate grade of 95.0%. No general and administrative (G&A) costs were applied. The selling price is $1,090/ton of concentrate, with transportation costs of $50/ton and no additional selling costs. The overall slope angles are 23 degrees for overburden and tailings, and 45 degrees for rock.
6. The resource reported has been tabulated in terms of a pit-constrained cut-off value of 1.50% Cg.
7. The block model was prepared using Datamine Studio RM™. A 30 ft x 30 ft x 15 ft block model was created, and samples were composited at 5 ft intervals. Grade estimation for graphite used data from drillhole data and was carried out using ordinary kriging (OK), inverse distance squared (ID2), and nearest neighbor (NN) methods. The OK methodology is the method used to report the mineral estimate statement.
8. Grade estimation was validated by comparison of the global mean block grades for OK, ID2, and NN by domain and composite mean grades by domain, swath plot analysis, and by visual inspection of the assay data, block model, and grade shells in cross-sections.
9. The SG assessment was carried out for all domains using measurements collected during the core logging process. The mean specific gravity value within the mineralized domains is 2.75.
10. The Mineral Resource Estimate was prepared following the CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (November 29, 2019).
11. The QP is unaware of any known environmental, permitting, legal, title-related, taxation, socio-economic, marketing or political issues or any other relevant issues that could materially affect this MRE.

1.8 Mineral Reserve Estimates

There are no Mineral Reserves for the ESM Zinc Project or the Kilborne Graphite Project.

1.9 Mining

Zinc

The mine plan tons at the ESM deposit are extracted using a combination of longitudinal retreat stoping (LRS), Cut and Fill (C&F), Panel Mining (PM) – Primary and Secondary (PAP & PAS), and development drifting underground mining methods with rock backfill. Longhole back-stopes are also used in the design where applicable. The mine plan scales up slightly from the current production rate of 2,275 ton/d to 2,800 ton/d by 2028 continuing through 2030 winding down in 2031. The current mine life is projected to be 6 years. During the period of production scale-up, mine tons will be supplemented by a small open pit operation called Turnpike.

The ESM deposit will be accessed from surface via the #4 Shaft, and all mineralized material and some waste rock will be hoisted out of the mine via that shaft. In addition to the existing development and raises, new lateral development and ramping will be required to access mineralized zones.

To supplement the ventilation provided by the raises, as the ramps are being driven, shorter internal ventilation drop raises will ensure air delivery to the active development face. As depth increases, a ventilation upgrade of a new raise to surface will be required to support the increasing fleet size.

Measured, Indicated, and Inferred Mineral Resources were included in the mine design and schedule optimization process. The mine plan is based on the Mineral Resource stated as of June 9, 2025 and is estimated at a 5.5% Zinc cut-off grade for the UG mine and 0.6% Zn for open pit mining. The LOM plan is considered to start August 2025 with the production from 2025 being calculated from actuals and short-range estimates.

For the underground mine, dilution was estimated based on typical stope dimensions to calculate unplanned overbreak experienced during mining operations. The rock quality at ESM is considered to be good geotechnically, so overbreak is considered to be minimal. For LRS and back-stopes, two sources of dilution were considered. Sloughing was estimated to be 2.0 ft on both the hanging wall and footwall of LRS stopes. For C&F, planned over break dilution of 0.5 ft was applied to both walls. A dilution grade of 0% Zn was assumed for all dilution.

Mine recovery was calculated under the following mine assumptions:

- C&F and waste development passing incremental cut-off, assume 95% mine recovery after losses.
- Longitudinal retreat and back-stopes assume 95% of mine recovery.
- Panel mining assumes 75% of mine recovery after losses from pillars left behind.

For the open pit mine, mining dilution and mining loss have been incorporated into the mining block model by reblocking and regularizing the geological resource block model.

The production schedule for the underground LOM is provided in Table 1-6. The schedule for open pit extraction is in Table 1-7.

Table 1-6: Mine production schedule

Item	Unit	Total	2026	2027	2028	2029	2030	2031	2032
Underground Mill Feed	kton	4,161	511	558	552	658	690	663	0
Zinc Grade	%	7.4	8.4	7.9	7.3	7.1	7.1	7.1	0.0
Contained Zinc	M lb	620	85	88	81	94	98	94	0

Table 1-7: Turnpike open pit conceptual schedule

Item	Unit	Total	2026	2027	2028	2029
Open Pit Mill Feed	kton	**399**	30	88	221	60
Total Open Pit Waste	kton	**1,060**	114	235	622	89
Stripping Ratio	W:O	**2.7**	3.8	2.7	2.8	1.5
Total Material moved	kton	**1,459**	144	323	843	149
Zinc Grade	%	**3.2**	2.3	2.9	3.2	3.8
Contained Zinc	000s lb	**25**	1.4	5.1	14.3	4.5

Source: Asi & McCracken, 2024

Graphite

The PEA mine design and mine plan are based on Inferred Mineral Resources to support the scoping level mine planning work for the Kilbourne Graphite Study. Pit analyses were completed on the Kilbourne deposit to identify the potential in-pit mineable Mineral Resources. These in-pit mineable Mineral Resources, referred to as Potential Mill Feed (PMF), are not Mineral Reserves and do not have demonstrated economic viability.

Conventional owner-operated open pit mining methods will be used to mine the material within the designed open pit of the Kilbourne deposit. This method was selected considering the deposit's proximity to the surface.

The reference point at which in-pit mineable resources are defined is where the mill feed is delivered to the concentrator plant facility, which includes the run-of-mine stockpiles. It incorporates mining dilution and mining loss assumptions for the open pit mining method.

Changes in the following factors and assumptions may affect the in-pit mineable Mineral Resources estimate:

- Concentrate price;
- Interpretations of mineralization geometry and continuity of mineralization zones; grade and geology estimation assumptions;
- Geomechanical assumptions;
- Ability of the mining operation to meet the annual production rate;
- Operating cost assumptions;
- Process plant recoveries;
- Mining loss and dilution;
- Ability to meet and maintain permitting and environmental licence conditions.

Open pit mining will include drilling and blasting with a combination of a backhoe-type excavator and front-end loader-type excavator loading blasted material into haul trucks, which will haul the material from the bench to the designated destination of the crusher, run-of-mine stockpile, or mine waste stockpiles, depending on the material type. Support equipment includes dozers, graders, utility loaders, water truck, and service vehicles.

The operation scenario for the Kilbourne deposit involves:

- Mining starts without pre-production stripping period requirement in Year 1.
- Average annual mining rate of PMF and waste over the life of mine (LOM) is approximately 4.83 M tons, with a peak of approximately 8.0 M tons at Year 8.
- The total PMF is estimated at 19.95 M tons, with an average grade of 2.84% Cg, and a cut-off grade of 1.5% Cg over a 13-year mine life of the open pit mines, with an overall strip ratio of 2.15 to 1.
- Total material mined over the LOM is 62.77 M tons, consisting of 19.95 M tons of PMF, 30.82 M tons of waste rock, 6.44 M tons of overburden, and 5.56 M tons of existing zinc tailings material;
- An average of 1.53 M tons per year of PMF will be sent to the concentrate plant to produce graphite concentrates.
- The mine plan ramp-up targets for concentrate plant feed throughput are set at 1.2 M tons for Year 1, 1.4 M tons for Years 2 and 3, and increasing to 1.7 M tons from Year 4 onward. These throughput levels align with the concentrate production targets of 22.5 k tonnes in Year 1, 27.5 k tonnes in Year 2, 38 k tonnes in Year 3 and 40 k tonnes from Year 4 onward, reflecting production and processing constraints.

During full production, the mine equipment fleet requirements were calculated to be 10 haul trucks, two hydraulic excavators, one wheel loader, and three production drills, in addition to the fleet of support and service equipment. All mining mobile equipment will be leased. The total mine workforce will reach a peak of 62 employees for the mining segment only.

To manage water that collects in the open pits, sumps will be developed on the pit floor as mining progresses, and a series of pumps will be used to pump the water to settling ponds located at surface. It has been assumed that in general, a total of two pumps should be adequate to serve the needs of the open pit.

1.10 Recovery Methods

Zinc

Mineralized material mined in the ESM deposits is processed at the existing ESM concentrator that was commissioned in 1970 and last shut down in 2008. The concentrator was refurbished in late 2017 and began processing in 2018. The concentrator flowsheet includes crushing, grinding, sequential lead and zinc flotation circuits, concentrate dewatering circuits, and loadout facilities.

Throughout the history of the Balmat operation (now ESM), the concentrator's design capacity of 5,000 tons per day has consistently exceeded the mines' production rate. The operating strategy is to operate the concentrator at its rated hourly throughput of 200 ton/h to 220 ton/h, but for only as many hours as necessary to suit mine production. It is currently processing between 10,124 ton/w and 11,375 ton/w operating on a schedule of one shift per day, 4 days per week. The concentrator suffers no notable losses from intermittent operation.

The zinc flotation circuit consists of rougher flotation followed by scavenger flotation. The scavenger concentrate returns to the head of the rougher circuit. Rougher concentrate undergoes two stages of cleaner flotation. Cleaner tailings are returned to the previous stage of flotation in the traditional manner. Currently,

the concentrator is producing zinc concentrate at an average of 60% zinc with 3% iron and 0.5% magnesium.

Lead values in the underground mineralization are expected to be low, and no lead concentrate production is planned from this source. Although lead values in the Turnpike open pit are anticipated to be higher and could support lead concentrate production, no lead concentrate is planned to be produced.

While aged, the concentrator is in good working order and runs efficiently. No modifications are required to continue processing underground feed and minimal modifications would be required for processing the mineralized material to be mined from the open pits.

Graphite

(a) Concentrate and Micronization Plants

The graphite Concentrate Plant was designed to maximize graphite recovery and minimize flake degradation, while minimizing capital expenditure and operating costs.

The process consists of a crushing and grinding circuit, rougher and cleaner flotation, and final graphite concentrate dewatering and handling circuit. The cleaning circuit consists of one stage of polish grinding and three stages of stirred media milling followed by cleaner flotation after each grinding stage to separate the liberated graphite from the gangue minerals.

The proposed reagents are consistent with other graphite projects, namely diesel as the graphite collector and Methyl Isobutyl Carbinol as the frother (MIBC). No gangue depressant or pH modifier is required. The only other reagent is a yet to be determined flocculant that aids in the settling of the tailings.

The process design is based on metallurgical testwork that was conducted by two independent laboratories. The expected overall graphite concentrate grade and recovery are 95.0% TC and 90.0%, respectively. The average feed grade to the mill is 2.84% Cg based on the mine design.
The plant will produce up to 44,500 tonnes (t) of graphite per year and 37,500 tonnes per year (t/y) on average, with a mill feed range between 1,226,000 and 1,864,000 short tons (ton).

Only a small percentage of the natural flake graphite (NFG) concentrate is sold as-is and, instead, most of the product is upgraded further to achieve higher sales prices. The first upgrading step consists of milling the flakes into a micronized product for sale or as the feed material for the Purification Plant.

The Micronization Plant has been designed for a processing rate of up to 44,500 t/y (dry basis) using a phased approach. The expected availability of the Micronization Plant is 90% for a total annual operating time of 7,183 hours or 6.2 t/h. It is estimated that 97% of the graphite concentrate feeding the air classifier mills is converted to a micronized product with the balance captured in the ultra-fines product.

The dried flotation concentrate is micronized in air swept classifier mills to produce micronized graphite with two different size specifications.

(b) Secondary Transformation Site

Micronized NFG concentrate will be processed at both the Purification Plant and CSPG Plant.

The Purification Plant comprises an acid leach process designed to process 10,670 t/y (dry basis) of micronized NFG concentrate with a fixed carbon (FC) content of ≥95 wt.%. This process purifies the material

to produce PMG with a FC content of ≥99.90 wt.%. Based on an assumed yield of 94.11 wt.%, the Purification Plant is expected to produce approximately 10,042 t/y (dry basis) of PMG.

The CSPG Plant is designed to process 21,340 t/y (dry basis) of micronized NFG through a dedicated acid purification circuit, followed by spheroidization and coating. The resulting CSPG will have a FC content of ≥99.95 wt.%. Assuming a yield of 94.11 wt.% for purification, 70 wt.% for spheroidization, and 105 wt.% for coating, the CSPG Plant is expected to produce 14,761 t/y (dry basis) of CSPG.

Wastewater from the Purification Plant and CSPG Plant will be managed through the wastewater treatment plant, though this will be addressed during the next phase when the site location is finalized.

1.11 Infrastructure

Zinc

Access to the ESM facility is by existing paved state, town, and site roads. All access to the mine/mill facility as well as concentrate haulage from the facility is by paved public roads and/or an existing CSX rail short line. The existing facilities at ESM mine are well established and will generally meet the requirements of the planned operations.

The ESM site is located adjacent to State Highway 812, approximately 1.5 mi from the junction with State Highway 58. A mile-long stretch of Sylvia Lake Road currently handles traffic to and from the site, including truck haulage of concentrate. Road maintenance is carried out by the Town and State Government Department of Highways.

There are currently two entries from Sylvia Lake Road providing access to the site. The main entry provides access to the parking lot and the approach to the office complex, and the tailings line entry is the waste truck haulage route to the tailings impoundment. These accesses are adequate, and no improvements are planned.

The existing mine office complex is a two-story steel frame and concrete block/galbestos-sided building with steel joist/concrete plank built up roof system. As part of the first floor, the maintenance vehicle storage garage, the boiler room, and the dry/lamp room is a 60 ft x 273 ft area. The dry, located on the ground floor, accommodates 125 people with individual lockers for clean clothes and hanging baskets for working clothes for all personnel, as well as the appropriate number of showers and toilet facilities.

The ground floor also contains mine offices, a boiler room and lamp room. Hot water for sanitary purposes is provided by quick recovery propane water heater, eliminating the need to operate a steam boiler through the summer months. The second floor contains a warehouse, machine shop, mine rescue room, first aid equipment room and training room.

Power to site is fed by a transmission line from Niagara Mohawk's substation at Battle Hill-ESM #5 circuit. On-site power is distributed to the plant and mine. ESM owns two portable generators for emergency use. One is a 125 kVA portable used for general 480 V / 220 V / 110 V applications. The other is a 100 kVA portable generator that will run the #2 emergency egress hoist.

Mill process and cooling water (non-potable) for the site are pumped from the Sylvia Lake pump house to two 100,000-gallon (gal) concrete deluge tanks near the concentrate storage building/rail loadout shed. Water is pumped from the reservoir tanks to the concentrator. Mine water is pumped from the mill basement sump down the 4-inch (in) shaft water line to the various mine levels.

Tailings are placed in a permitted 260-acre conventional impoundment located approximately 4,000 ft north of the mill. The TMF is categorized as a low-risk dam by the New York State Bureau of Flood Protection and

Dam Safety. Water from the tailings flows through a series of retention ponds before being discharged into Turnpike Creek under the New York State Department of Environmental Conservation (NYSDEC) permit #NY0001791.

The mineralized materials and waste rock from the development and operation of the mine is non-acid-generating due to the alkaline nature of the host rock. The designated surface pads were designed such that any runoff will drain to the concentrator pond. The capacity of this stockpile area is sufficient for the tonnages in the contained mine schedule.

The ultimate capacity of the 260-acre footprint has been estimated at 20 million tons (Mton), with immediate capacity of 1.7 Mton, before further embankment construction is needed. Tailings and waste rock materials at the TMF are non-acid generating due to the high carbonate content of the host rocks. Volunteer vegetation is evident and continues to naturally revegetate inactive areas of the TMF.

Graphite

The Kilbourne Site will be located within the boundaries of the existing ESM site and will include the open pit mine, tailings management facilities, a Concentrate Plant, and a Micronization Plant. As part of this vertically integrated model, PMF extracted from Kilbourne open pit mine will be processed at the Concentrate Plant and subsequently micronized at Kilbourne Site. The micronized NFG concentrate will then be transported to the Secondary Transformation Site.

The Secondary Transformation Site will accommodate both the Purification Plant and the Coated Spherical Purified Graphite (CSPG) Plant. These facilities will be situated in an industrial hub within New York State to leverage existing infrastructure and utilities. The transported micronized NFG concentrate will be further upgraded at the Purification and CSPG Plants, which aim to produce purified micronized graphite (PMG) and CSPG, respectively.

Delivering approximately 1.53 million tons (1.39 million tonnes) of mill feed annually, the Kilbourne open pit will produce around 40,000 tonnes of graphite concentrate per year. Mining activities will generate roughly 30.8 M tons of waste rock and 6.4 M tons of overburden, which will be stored in engineered stockpiles equipped with runoff collection systems. The site layout includes the open pit, concentrate plant, stockpiles, and tailings facilities, all strategically positioned to optimize operational efficiency and minimize environmental impact.

Infrastructure development at the Kilbourne Site will include new and upgraded roads totaling approximately 7.8 miles to facilitate haulage and plant access. Construction of the extended TMF will result in the closure of the western access to Sylvia Lake Road; however, local traffic will have unobstructed access through the eastern entrance from Balmat-Fowler Road.

A diesel fueling station will be installed with an initial capacity of 5,300 gal, expanding to 10,600 gal in Year 5 to meet growing demand. Maintenance facilities will feature a steel structure measuring 105 ft by 70 ft, equipped with three heavy equipment bays with overhead cranes, a light vehicle bay and a dedicated wash bay housed in a separate structure.

Utilities will require an estimated 12–15 MVA of electrical power, supplied through a new skid-mounted substation integrated with the existing ESM infrastructure. Preliminary discussions with National Grid indicate support for the additional electrical load. Process water will be sourced from treatment ponds and Sylvia Lake, potable water will be provided in bottled form, and wastewater will be managed via a buried tank serviced by local providers. Fire protection systems will include a 300-horsepower pump, one kilometer of buried piping, and 20 hydrants strategically placed around the process plant site.

Water management strategies for the Kilbourne Project are designed to integrate the Turnpike Creek and Sawyer Creek watersheds, employing a closed-loop system to minimize freshwater consumption and control discharges. Stormwater will be managed through segregation of clean and contact water flows, erosion control measures, and sediment basins. A preliminary water balance model has been developed to account for precipitation, runoff, groundwater inflows, and operational phases, ensuring adaptive management throughout the LOM. This model supports compliance with regulatory standards and anticipates future environmental requirements.

Tailings management is a critical component of the Project, involving a multi-stage plan that includes the Extended TMF, Raised TMF, Kilbourne Pit backfilling, and deposition in the Historic Arnold Pit. Over the LOM, approximately 484.6 million cubic feet of tailings will be managed, including both existing zinc tailings and new graphite tailings. TMF designs incorporate staged expansions, containment dikes, and seismic stability measures based on a peak ground acceleration of 0.34 g. The Historic Arnold Pit will require full dewatering before tailings deposition can begin and construction of containment dikes to provide the required capacity.

Processing infrastructure at the Kilbourne Site will include a Concentrate Plant equipped with offices, workshops, laboratories, reagent storage, and change rooms. The Micronization Plant will be collocated with the concentrator and will utilize turnkey air-swept classifier milling systems requiring electricity and compressed air. Maintenance for micronization equipment will be minimal, with periodic replacement of wear parts. One-ton bulk bags of finished products will be stored in the concentrator warehouse.

The Secondary Transformation Site will house the Purification and CSPG Plants. It is assumed to be located in an established prime chemical industrial area, providing strategic advantages such as access to developed plots, bulk utilities, and cost-effective service solutions. These plants will require additional infrastructure, including internal roads, parking bays, step-down transformers, and specialized facilities for handling hazardous materials such as hydrofluoric acid. Onsite utilities will include water purification systems, steam generation units, compressed air systems, and integrated power and water distribution networks. The location of this site is under evaluation, with preference given to industrial hubs within New York State to ensure proximity to transportation infrastructure and international markets. ESM is in discussions with counterparties regarding a few site locations that meet these requirements.

The Kilbourne Graphite Study emphasizes leveraging existing ESM infrastructure while introducing new facilities to support graphite production. The Project integrates robust water and tailings management strategies and comprehensive utility systems to ensure operational efficiency, environmental compliance, and long-term sustainability.

1.12 Environment and Permitting

Zinc

All permits required to operate the ESM #4 Mine are active and in place. Additionally, there are no significant factors or risks that may affect access, title, or the right or ability to perform work on the ESM properties.

Permits have remained active for mining at ESM #4 since the previous operating periods. No environmental studies are underway at this time, nor are any required for this existing fully permitted mine. The site is well managed and is in compliance with all environmental regulatory requirements.

Renewals for State Pollutant Discharge Elimination System (SPDES) Permit and Water Withdrawal Permit

were submitted to the NYSDEC in a timely manner. Both permits are on the Department's schedule for technical review due to the length of time elapsed since the previous review.

Tailings are non-acid generating so conventional reclamation methods can be used to rehabilitate the tailings area. Currently, surface water discharge is in compliance with ESM's SPDES permit and is expected to remain so for operating, closure, and post-closure periods.

The ESM #2 Mine site has been partially reclaimed. ESM #2 Shaft serves as secondary access to the underground operations at the #4 Mine and will be included in the final reclamation of the #4 Mine and concentrator complex. Reclamation of the ESM #4 Mine and tailings is assured with a $2,701,000 surety bond.

Graphite

(a) Mine, Concentrator, and Micronization Plant

New York State Permitting

A major modification to ESM's mining permit will need to be approved by the NYSDEC. The proposed Kilbourne Pit extends beyond the currently permitted LOM boundary; consequently, the mining permit application (for modification) will necessitate a State Environmental Quality Review Act (SEQR) review due to the potential for significant environmental impacts. In accordance with NYSDEC requirements, a comprehensive suite of environmental and technical studies must be completed prior to submitting a permit modification application. These include wetlands delineation, visual and noise impact assessments, residential well surveys, pre-blast building inspections, traffic analyses, and a hydrogeologic impact evaluation. Although it is not anticipated, the large area of the Kilbourne Project's footprint is such that an archaeological or cultural resources survey may be required. The necessity of such studies would be determined by the NYSDEC, in consultation with the State Historic Preservation Office (SHPO). If SHPO identifies a potential sensitivity, it will require a Phase 1A archaeological assessment, and a subsequent Phase 1B field survey if an archaeological site is identified. The above studies will all be incorporated into a revised Mined Land Use Plan (MLUP) to accompany ESM's mining permit application. ESM is already advancing discussions with the regulators to kick-start the required permitting.

Upon completion of the required studies and MLUP revisions, the mining permit application will be submitted to the NYSDEC. It is anticipated that the Project will be classified as a Type I action under SEQR, which typically requires a Draft Environmental Impact Statement (DEIS) when a positive declaration is issued by NYSDEC. To ensure compliance with applicable standards and operational requirements, the following will likely require resubmission for review and approval: Air Registration/Permit, Water Withdrawal Permit (WWP), Building Permits, and a State Pollution Discharge Elimination System (SPDES) permit modification.

The graphite at the Kilbourne Site comes from a similar host rock as the zinc that ESM currently mines. As a result, the tailings from graphite processing are expected to be non-acid-generating. Water used in graphite processing, along with quarry pump-out water from the Kilbourne Pit and the Historic Arnold Pit, will be recycled as much as possible. Any water not recycled will be released into ESM's treatment system, together with the zinc process water.

The area of the Kilbourne Graphite requires removing parts of the existing tailings ponds and serpentine ponds, as well as relocating the SPDES discharge point further downstream. ESM's SPDES permit will need

to be updated to reflect these changes, including the addition of graphite tailings and process water, a revised TMF, and a new settling pond.

ESM's WWP will be modified to include any new water sources, pumps, or increased water usage due to the addition of the graphite processing.

Federal Permitting

Given the likelihood of federal funding for the Kilbourne Project, its development may require a small number of well-defined federal permits and reviews, consistent with other large mining projects in the US. In this respect, key authorizations are outlined below:

- Clean Water Act Section 404 Permit (U.S. Army Corps of Engineers): Required where the mine footprint intersects federally regulated wetlands or streams. This is a standard permit for any US mining project having these impacts. Current wetlands delineation is ongoing to determine the applicability of this.
- Section 401 Water Quality Certification (WQC): Section 401 of the Clean Water Act requires that any applicant for a federal permit that may result in a discharge to waters of the United States must obtain a WQC. In New York, the 401 WQC is issued by NYSDEC, but it is tied to the Army Corps permit. The 404 permit cannot be obtained without NYSDEC's 401 WQC.
- National Environmental Policy Act (NEPA) Environmental Impact Statement: Provides a comprehensive review of environmental, cultural, and community impacts, led by the United States Army Corps of Engineers (USACE) in coordination with other federal agencies. To avoid duplication, ESM will coordinate with the NYSDEC and the USACE to ensure that the preparation of the DEIS will also serve the needs of the NEPA EIS for USACE purposes. USACE has indicated that it may require the less comprehensive Environmental Assessment (EA) for the Kilbourne Project, rather than an EIS; however, this decision is only preliminary at this time.
- Endangered Species Act (Section 7): To confirm there are no impacts to federally protected species. Based on a preliminary review of the Project, current species potentially present include Northern long-eared bat (Endangered), tricolored bat (proposed endangered), and the monarch butterfly (proposed threatened). It could restrict tree clearing to certain times of the year.
- National Historic Preservation Act (Section 106): To review potential cultural or historic resources. ESM does not expect anything specific in this regard to the Kilbourne Project (see above under New York State Permitting).

Given the aspect of federal funding associated with Kilbourne, the Project has a FAST-41 designation. This federal program coordinates permitting schedules across agencies and sets clear deadlines. FAST-41 designation ensures transparency, accountability, and limits legal challenges, giving investors confidence that the Project can be permitted on a predictable timeline. ESM is working with federal and state agencies to align permitting schedules given the strategic nature of the Kilbourne Project and has received indication of the prospect of alignment and completion of any federal permits within a 16-month timeline, which is aligned with the projected state permitting.

(b) Secondary Transformation Site

State Permitting

Regarding Secondary Transformation Site (Purification and CSPG Plants), these components are not included in the current Graphite Study due to the early stage of the Graphite Project. Once a final location for the proposed Purification Plant and CSPG Plant is selected, the Project will undergo a full SEQR review, and it

is likely that a Draft Environmental Impact Statement (DEIS) will be required due to the scale and nature of the facility. The DEIS will evaluate all potential environmental, socio-economic, and physical impacts associated with the plant's construction and operation, including air and water emissions, land disturbance, noise, traffic, community effects, and any other relevant considerations, ensuring that these issues are fully identified and addressed.

Federal Permitting

It is not anticipated that any federal permitting will be required, however, this is dependent on site selection and may change.

1.13 Operating and Capital Cost Estimates

Zinc

Estimated Project capital costs (including closure costs) total $68.6M, consisting of the following distinct areas:

- #4 infrastructure and process capital;
- #4 mining capital equipment;
- #4 mining capital development;
- N2D and expansionary capital.

The capital cost estimate was compiled using a combination of quotations, labor rates, and database costs.

Table 1-8 presents the capital estimate summary for each area in 2025 US$ with no escalation.

Table 1-8: Capital cost summary

Area	Cost Estimate ($M)
#4 Infrastructure & Process Capital	5.4
#4 Mining Capital Equipment	8.0
#4 Mining Capital Development	9.6
N2D and Expansionary Capital	35.5
Total Capital Cost	**58.5**
Closure Costs	15.2
Salvage Value	(5.1)
Total Capital Cost (including closure costs)	**68.6**

Capital costs for the #4 Mine are estimated to be $23M. This includes replacements for two mechanical bolters, three LHDs, two haul trucks, and underground support equipment. Additional equipment including five LHDs, two haul trucks, an additional bolter, two additional jumbo drills, transformers required for electrical expansions, and ventilation fans and doors. The costs of additional equipment are applied by the expected area of use.

ESM has assumed that due to the short life of the pits (4 years), labor resources used to mine the open pit will eventually be shared with the graphite pit.

Capital item allowance for the open pit includes upgrade of the railway right of way into a haul road, land acquisition, process plant upgrade for lead circuit, and site facility preparation.

Closure costs were estimated based on the SRK cost estimate to a total of $15.2M, this will be offset by the estimated $5.1M in salvage value. This cost is, however, not included in the economic model due to ongoing mining discoveries and expansions.

Indirect, owner's, and contingency costs are all incorporated into the capital cost estimates.

Preparation of the site operating cost estimate is based on current UG operation performance. The site operating cost is based on Owner-owned and operated mining/services fleets, and minimal use of permanent contractors except where value is provided through expertise and/or packages efficiencies/skills.

Site operating costs in this Item of the report are broken into four major sections, which include mining, processing, general and administrative (G&A), and concentrate transportation costs.

Site operating costs (Table 1-9) are presented in 2025 US$ on a calendar year basis. No escalation or inflation is included.

Table 1-9: Breakdown of estimated site operating costs

Underground	Fixed Cost ($K/y)	Variable Cost ($/ton milled)	LOM Cost ($M)
#4 Mine			
Mining – Mineralized Material	351.00	53.00	165.25
Mining – Waste	-	17.00	6.88
Processing	854.00	10.00	38.25
G&A	9,256.00	-	64.66
Concentrate Transportation	8.23	8.00	31.01
Royalties	0.09	0.18	0.17
Subtotal	**10,469.32**	**88.18**	**306.22**
#2 Mine			
Mining – Mineralized Material	-	33.00	37.21
Mining – Waste	-	17.00	4.85
Processing	-	10.00	11.28
G&A	-	2.00	2.26
Concentrate Transportation	-	-	-
Royalties	**-**	**-**	**-**
Subtotal	**-**	**62.00**	**55.60**
Total	**10,469.32**	**150.18**	**361.82**

Graphite

The capital and operating estimate is classified as a Class 5 estimate, as defined in the Association for the Advancement of Cost Estimation (AACE) Recommended Practice No. 47R-11, typically used for preliminary evaluations. For the purpose of this study, an accuracy range of approximately +/- 40% has been assumed.

All capital and operating estimate are expressed in United States dollars ($), and the base date of estimate and currency exchange rates were obtained on Q1 2025.

The total capital cost for the Kilbourne Study is estimated at $431.7M, which includes initial, expansion, and sustaining capital requirements. The Kilbourne Project involves two sites. The first is the Kilbourne Site, which includes the open pit, site infrastructure and TMF, the Concentrate Plant, and the Micronization Plant. The second is the Secondary Transformation Site, which includes the Purification Plant and the CSPG Plant. The Micronization, Purification, and CSPG facilities are constructed in two phases—initial and expansion—as reflected in the capital cost schedule in the cash flow model.

A summary of the capital costs, including initial, expansion, and sustaining capital, is presented in Table 1-10.

Table 1-10: Initial, expansion and sustaining capital costs

Project Area	Total ($K)	Initial Costs ($K)	Expansion Costs ($K)	Sustaining Costs ($K)
Open Pit Mine	41,641	-	-	41,641
Site Infrastructure and TMF	46,150	27,241	-	18,909
Concentrate Plant	115,922	72,610	-	43,312
Micronization Plant	22,362	11,497	10,865	-
Purification Plant	13,311	5,291	8,020	-
CSPG Plant	99,477	-	99,477	-
Closure and Salvage	-4,065	-	-	-4,065
Direct costs	**334,799**	**116,639**	**118,362**	**99,798**
Owner's Cost and Indirects	49,939	15,792	33,900	247
Contingency	47,000	23,328	23,672	-
Total	**431,738**	**155,759**	**175,934**	**100,045**

The operating cost estimate, similar to capital cost estimate, includes all activities at both the Kilbourne Site and the Secondary Transformation Site. Operating costs cover the open pit mine, site infrastructure, TMF, and the Concentrate, Micronization, Purification, and CSPG Plants, as well as the transportation of micronized NFG from the Kilbourne Site to the Secondary Transformation Site.

Over the 13-year life of mine, operations are based on 62.77 M tons of material mined, 18.10 M tonnes (19.95 M tons) milled, and total production of 486.7 k tonnes of graphite concentrate, resulting in saleable products of 157.6 k tonnes of micronized NFG, 121.4 k tonnes of PMG, 110.8 k tonnes of CSPG, and 26 k tonnes of remaining concentrate.

Total life of mine operating costs are estimated at $886M presented in Table 1-11.

Table 1-11: Project All-in Operating Costs

Project Area		LOM Total	Remaining Concentrate	NFG Micronized	PMG	CSPG
		($K)	($/t Concentrate)	($/t Micronized NFG)	($/t Saleable PMG)	($/t Saleable CSPG)
Open Pit	Kilbourne Pit Mining	183,832	378	389	414	563
Site Infrastructure	G&A	47,077	97	100	106	144
	TMF	11,178	23	24	25	34
Concentrate and Micronization Plants	Concentrate Plant	239,677	492	508	539	734
	Micronization Plant	75,647	-	176	186	228
Purification and CSPG Plants	Transport[(1)]	21,694	-	-	80	108
	Purification Plant	107,222	-	-	883	-
	CSPG Plant	199,610	-	-	-	1,801
Operating Costs		**885,936**	**990**	**1,197**	**2,233**	**3,612**

Notes:
(1) Micronized NFG concentrate transportation cost from Kilbourne Site to Secondary Transformation Site.
Numbers may not add up due to rounding.

1.14 Economic Analysis

Zinc

Item 22 of Form 43-101F1 permits producing issuers to exclude the information required under Item 22 for technical reports on properties currently in production, provided there is no material expansion of those operations. As no material expansion of ESM's Zinc Operations is planned, the information required under Item 22 related to ESM's Zinc Operations has been excluded from this report.

Graphite

A 7% discount rate was applied to the cash flow to derive the Kilbourne Study project's net present value on a pre-tax and post-tax basis. Cash flows have been discounted annually starting in the second year with an end of year period under the assumption that major project financing would be carried out at this time.

Table 1 12 presents the anticipated operating results for the potential future mining operations at the Kilbourne Project. Based on the expected product distribution, the weighted average sales price listed in Table 1 13 has been considered for the Project.

The summary of the financial evaluation for the base case of the Project is presented in Table 1-14.

Table 1-12: Operating results summary

Parameters	Unit	Value
Physicals		
Mine Life	year	12.8
Total Material Mined	ton	62,769,000
Total Waste Mined	ton	42,818,000
Total ROM Mined	ton	19,951,000
ROM Head Grade	% Cg	2.84
Mill Recovery	%	89.7
Total Metal Tonnage Recovered	ton	509,670
	tonne	462,364
Concentrate Grade	%	95%
Total Concentrate Produced	tonne	486,699
Operating Costs		
Mining	$/ton milled	9.21
Concentrate Processing	$/ton milled	12.01
G&A	$/ton milled	2.36
Secondary Processing	$/ton milled	20.26
Tailings Relocation	$/ton milled	0.56
Total Operating	$/ton milled	44.41
	$/tonne milled	48.95
Operating Costs of Salable Products		
STD Purity Flake Concentrate	$/tonne	990
STD Purity Micronized Flake Grades	$/tonne	1,197
High Purity Micronized Flake Grades	$/tonne	2,233
CSPG Anode Grades	$/tonne	3,612
Capital Costs		
Initial Capital	$M	155.8
Expansion Capital	$M	175.9
Sustaining Capital	$M	100.0

Table 1-13: Study input pricing

Product	Weighted Average Sale Price ($/Mt)
STD Purity Flake Concentrate (95.0% LOI MIN)	1,575
STD Purity Micronized Flake Grades (95.0% LOI MIN)	3,770
High Purity Micronized Flake Grade (99.9% LOI MIN)	5,185
CSPG Anode Grades (99.95% LOI MIN)	11,193

Table 1-14: Financial analysis summary

Parameters	Unit	Value
Pre-Tax Cash Flow	$M	1,187.7
Pre-Tax NPV	$M	580.6
Pre-Tax IRR	%	38.9%
Pre-Tax Payback Period	year	2.66
Taxes	$M	134.1
Post-Tax Cash Flow	$M	1,053.6
Post-Tax NPV	$M	513.2
Post-Tax IRR	%	37.0%
Post-Tax Payback Period	year	2.69

1.15 Adjacent Properties

There are no adjacent properties relevant to the scope of this report.

1.16 Other Relevant Data and Information

To the best of the authors' knowledge, there is no other relevant data, additional information or explanation necessary to make the report understandable and not misleading.

1.17 Interpretation and Conclusions

Zinc

The ESM operation has a long history of successful mining and mineral processing, with over a century of production and a strong record of replacing Mineral Resources through ongoing exploration. The current Mineral Resource estimates are supported by extensive drilling, mapping, and geological modeling using Leapfrog™ Geo and Edge software. Mining will employ a combination of underground methods such as LRS, Cut and Fill, Panel Mining, longhole stoping and a small open pit, with material processed at the existing ESM concentrator, which has demonstrated reliable performance and requires no major modifications. All key permits remain active and in good standing, and no significant access or title risks have been identified. While economic outcomes remain sensitive to commodity prices, dilution control, recoveries, and ventilation constraints, these risks are typical of comparable operations and can be mitigated through proper engineering and planning.

Graphite

Based on the assumptions and constraints outlined, it is the conclusion of the QPs that this Preliminary Economic Assessment demonstrates reasonable technical and economic viability and is considered suitable to advance to the next stage of development. Several opportunities and risks were identified during the study and should be addressed in the next phase.

The PEA proposes the use of industry standard equipment and operating practices. To date, the QPs are not aware of any fatal flaws for the Project.

1.18 Recommendations

Zinc

The items shown in Table 1-15 are recommended for ESM to improve confidence and performance of the PEA mine plan and economics.

Table 1-15: Project recommendations and estimated cost

Item	Cost ($)
Infill and Exploration Drilling	1,230,000
Ventilation Trade-off Study	50,000
Sorting Testwork and Integration Study	100,000
Total Estimate	**1,380,000**

The items shown in Table 1-16 are recommended exploration activities for ESM to advance systematic district-scale exploration and prioritize targets within historically productive stratigraphies.

Table 1-16: Cost estimate for recommended exploration activities

Item	Estimated Cost ($)
Surface Geochemical Sampling	200,000
Near Mine – Exploration Drilling	670,000
Exploration Drilling	1,130,000
Geophysics	115,000
Land Acquisition and Management	-
Estimate for 2026	**2,115,000**
Annual Estimate	**2,000,000**

Graphite

The items listed in Table 1-17 are proposed for Titan to proceed with the Project advancement for the Kilbourne Site and Secondary Transformation Site. The recommended Graphite programs for sites are not successive.

Table 1-17: Project recommendations and estimated cost

Recommended Items	Estimated Cost ($)
Kilbourne Site	18,745,000
Secondary Transformation Site	7,851,600
Total Estimate	**26,596,600**

1.19 References

All references in this report can be found in Item 27 of the Technical Report.

DIVIDENDS

Set out below are all dividends declared by the Company for the three most recently completed financial years:

Year	Declaration Date	Amount per Common Share
2023	• March 7	• C$0.01

On December 13, 2022, the Company adopted a dividend policy to declare a quarterly cash dividend of C$0.01 per common share. On June 14, 2023, the Company suspended the payment of its quarterly dividend in order to preserve capital. This decision reflected the Company's focus on strengthening its balance sheet as it navigates the downturn in zinc prices. The Company is not currently restricted from issuing dividends and will consider re-instating a dividend policy in due course.

CAPITAL STRUCTURE

General Description of Capital Structure

The Company is authorized to issue an unlimited number of common shares. The common shares of the Company are all without par value and rank equally as to dividends, voting powers and participation in assets and as to all other benefits which might accrue to holders of the common shares. No shares have been issued subject to call or assessment. Each common share carries one vote at shareholder meetings of the Company. All of the common shares outstanding as at the date of this AIF are fully paid and non-assessable. There are no pre-emptive or conversion rights, and no provision for redemption, purchase for cancellation, surrender or sinking funds attached to any of the Company's common shares. Provisions as to the modification, amendment or variation of such rights or provisions are contained in the Company's Articles of Incorporation.

As at the date hereof, there were 98,288,104 common shares issued and outstanding, 10,666,666 warrants outstanding and 7,890,557 options outstanding.

MARKET FOR SECURITIES

Trading Price and Volume

The common shares are listed on the NYSE-A under the stock symbol "TII" and the TSX under the stock symbol "TI". The following tables set forth information relating to the monthly trading of the Common Shares on the TSX and the NYSE-A, as applicable, during fiscal 2025.

TSX

Period (2025)	High (CAD$)	Low (CAD$)	Volume (no. of Common Shares)
January[(1)]	0.31	0.255	1,431,410
February[(1)]	0.29	0.245	511,620
March[(1)]	0.445	0.25	4,254,329
April[(1)]	0.67	0.35	2,460,400
May[(1)]	0.69	0.49	1,021,626
June[(1)]	0.72	0.49	609,440
July[(1)]	1.77	0.69	4,338,010
August[(1)]	1.40	1.13	1,308,388
September[(1)]	1.68	1.17	2,527,840
October[(1)]	3.17	1.66	8,346,538
November	4.39	3.09	1,755,463
December	5.04	3.00	1,556,177

(1) The Common Shares of the Company were consolidated on the basis of one post-consolidation Common Share for every 1.5 pre-consolidation Common Shares on November 3, 2025. The figures prior to November 2025 are on a pre-consolidation basis.

NYSE American

Period (2025)	High (US$)	Low (US$)	Volume (no. of Common Shares)
November 21 – 30[(1)]	2.90	2.26	632,392
December	4.18	2.09	6,270,817

(1) The Common Shares of the Company began trading on the NYSE American on November 21, 2025.

DIRECTORS AND OFFICERS

At the date of this AIF the following were the directors and officers of the Company:

Name, Occupation and Security Holdings

Name, Province or State and Country of Residence	Date First Appointed	Position Held with the Company and Present and Principal Occupation During the Past Five Years[(1)]
Richard W. Warke British Columbia, Canada	October 15, 2012	**Executive Chairman of the Company**; Executive Chairman of Solaris Resources Inc. from January 2020 to December 2024; Executive Chairman of Augusta Gold Corp. from January 2021 to October 2025; and Director of Armor Minerals Inc. since February 2015 and President and CEO since October 2018.

Name, Province or State and Country of Residence	Date First Appointed	Position Held with the Company and Present and Principal Occupation During the Past Five Years[1]
Donald R. Taylor Arizona, USA	June 21, 2018	**Director and Vice Chair of the Company**; President and CEO of Augusta Gold Corp. from April 2021 to October 2025.
Lenard Boggio[2][3][4] British Columbia, Canada	January 1, 2017	**Director of the Company**; Independent corporate director of several publicly listed corporations; Partner of PricewaterhouseCoopers LLP from 1988 and senior member of the firm's mining industry group until his retirement from the firm in May 2012.
George Pataki[2][4] New York, USA	June 29, 2017	**Director of the Company**; Senior Counsel at Norton Rose Fulbright since March 2007; Co-founder and Chairman or the Pataki-Cahill Group.
John Boehner[2][3] Florida, USA	October 9, 2018	**Director of the Company**; Strategic Advisor for Squire Patton Boggs since November 2017.
William Mulrow[3][4] New York, USA	October 9, 2018	**Director of the Company**; Consultant to Blackstone since December 2025 prior to which he was Senior Advisory Director at Blackstone Group from May 2017 to December 2025.
Rita Adiani Texas, USA	October 1, 2024	**President & Chief Executive Officer of the Company**; Senior Vice President, Strategy & Corporate Development at Arizona Sonoran Copper Company from 2021 to 2024
Purni Parikh British Columbia, Canada	November 12, 2021	**Senior Vice President, Corporate Affairs and Corporate Secretary of the Company**; Senior Vice President, Corporate Affairs and Corporate Secretary for Highlander Silver Corp. since January 2025 ,Solaris Resources Inc. from November 2019 to December 2024, and Augusta Gold Corp. from November 2020 to October 2025.
Kevin Hart British Columbia, Canada	January 6, 2025	**Chief Financial Officer of the Company;** Chief Financial Officer & Corporate Secretary of Inca One Gold Corp. from 2017 to December 2024.
Tom Ladner British Columbia, Canada	November 23, 2020	**General Counsel of the Company**; General Counsel and before that, VP Legal, for the Augusta Group of Companies, including Highlander Silver Corp. (and formerly Solaris Resources Inc. and Augusta Gold Corp.) since November 2020.
Joel Rheault New York, USA	February 26, 2024	**VP Operations of the Company**; Mine General Manager at ESM since July 2018.
Jennifer Hood New York, USA	September 8, 2025	**VP Commercial & Sales of the Company**; Chief Supply Chain Officer, Head of Fire Retardants, VP, Supply Chain for Compass Minerals from September 2019 to March 2025.

(1) Information has been provided by the directors and officers of the Company.

(2) Member of the Company's Audit Committee.

(3) Member of the Company's Compensation Committee.

(4) Member of the Company's Nominating and Corporate Governance Committee.

The directors of the Company are elected annually and hold office until the next annual meeting of shareholders or until their successors are elected or appointed. There are three committees of the Board, an Audit Committee, a Compensation Committee, and a Nominating and Corporate Governance Committee.

To the knowledge of the Company, the number of common shares of the Company which are beneficially owned, or controlled or directed, directly and indirectly, by all directors and officers of the Company, as a group, as of the date here of, is 55,310,638 (approximately 56.27% of the Company's issued and outstanding share capital).

Cease Trade Orders and Bankruptcies

Except as disclosed below, no director or executive officer of the Company is, as at the date of the AIF, or was within 10 years before the date of the AIF, a director, chief executive officer or chief financial officer of any company (including the Company), that (a) was subject to an order that was issued while the director or executive officer was acting in the capacity as director, chief executive officer or chief financial officer, or (b) was subject to an order that was issued after the director or executive officer ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer.

Except as disclosed below, no director or executive officer of the Company, or a shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company, or a personal holding company of any such persons, as at the date of this AIF, is or has been within the 10 years before the date of this AIF, a director or executive officer of any company (including the Company) that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or was subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold its assets; or has, within 10 years before the date of this AIF, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or become subject to or instituted proceedings, an arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director, executive officer or shareholder.

Mr. Boggio was a director of Pure Gold Mining Inc. ("**Pure Gold**") until March 30, 2023. Pure Gold owned the Madsen Mining property, located near Red Lake Ontario. After redeveloping the property and processing facilities, Pure Gold experienced significant start up and operational difficulties. Consequently, on October 31, 2022, Pure Gold applied for and received an initial order for creditor protection from the Supreme Court of British Columbia (the "**Court**") under the Companies' Creditors Arrangement Act ("**CCAA**"). KSV Restructuring Inc. was appointed as the monitor. On November 10, 2022, the Court approved a Sales and Investment Solicitation Process Order, among other relief. On March 30, 2023, the Court approved Pure Gold's appointment of a Chief Administrative Officer and all members of the Pure Gold board of directors resigned immediately. Pure Gold's common shares were suspended from trading on the NEX Board of the TSX Venture Exchange. Pure Gold was subsequently acquired by West Lake Gold Mines on June 16, 2023 under the CCAA proceedings.

Mr. Hart was an officer of Inca One Gold Corp. ("**Inca One**") until October 2024. On June 3, 2024, Inca One received an initial order for creditor protection from the Court under the CCAA. On October 7, 2024, the Court made a final receivership order appointing FTI Consulting Canada Inc. as receiver and manager. In connection with the aforementioned matter, Inca One's common shares were cease traded for failure to file its annual financial statements for the year ended April 30, 2024. On November 7, 2025, the receivership proceedings were terminated.

Penalties or Sanctions

No director or officer of the Company, or a shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company, has been subject to any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement since December 31, 2000 that would likely be important to a reasonable investor in making an investment decision, with a securities regulatory authority; or been subject to any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

Conflicts of Interest

The directors of the Company are required by law to act honestly and in good faith with a view to the best interest of the Company and to disclose any interests which they may have in any project or opportunity of the Company. If a conflict of interest arises at a meeting of the Board, any director in a conflict will disclose his interest and abstain from voting on such matter. In determining whether or not the Company will participate in any project or opportunity, that director will primarily consider the degree of risk to which the Company may be exposed and its financial position at that time.

To the best of the Company's knowledge, there are no known existing or potential conflicts of interest among the Company, its promoters, directors, officers or other members of management of the Company as a result of their outside business interests except as described herein and also that certain of the directors, officers, promoters and other members of management serve as directors, officers, promoters and members of management of other public companies, and therefore it is possible that a conflict may arise between their duties as a director, officer, promoter or member of management of such other companies. See "Financings" and "Directors and Officers".

The directors and officers of the Company are aware of the existence of laws governing accountability of directors and officers for corporate opportunity and requiring disclosures by directors of conflicts of interest and the Company will rely upon such laws in respect of any directors' and officers' conflicts of interest or in respect of any breaches of duty by any of its directors or officers. Such directors or officers, in accordance with the *Business Corporations Act* (British Columbia), will disclose all such conflicts and they will govern themselves in respect thereof to the best of their ability in accordance with the obligations imposed upon them by law.

LEGAL PROCEEDINGS AND REGULATORY ACTIONS

Legal Proceedings

The Company is from time to time involved in various legal proceedings related to its business. Management does not believe that adverse decisions in any pending or threatened proceeding or that amounts that may be required to be paid by reason thereof will have a material adverse effect on the Company's financial condition or results of operations.

Regulatory Actions

There are no: (a) penalties or sanctions imposed against the Company by a court relating to securities legislation or by a securities regulatory authority during the Company's most recently completed financial period and up to the date of this AIF; (b) other penalties or sanctions imposed by a court or regulatory body against the Company that would likely be considered important to a reasonable investor in making an investment decision; or (c) settlement agreements the Company entered into with a court relating to securities legislation or with a securities regulatory authority during the Company's most recently completed financial period and up to the date of this AIF.

INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Other than as set forth earlier in this AIF, to the knowledge of the Company, no director, executive officer, person or company that beneficially owns, or controls, or directs, directly or indirectly, more than ten percent of the Company's voting securities, or associates or affiliates of the foregoing, has had any material interest, direct or indirect, in any transactions in which the Company has participated within the three most recently completed financial years or in the current financial year prior to the date of this AIF, which has materially affected or is reasonably expected to materially affect the Company.

TRANSFER AGENTS AND REGISTRARS

The Registrar and Transfer Agent for the common shares in British Columbia is Computershare Investor Services Inc., at its offices at 4th Floor, 510 Burrard Street, Vancouver, British Columbia, V6C 3B9.

MATERIAL CONTRACTS

The only material contracts, which the Company or its subsidiaries have entered into in the last financial year, or previously if still in effect, other than in the ordinary course of business, are as follows:

(i) the off-take agreement with Glencore Ltd. dated effective October 27, 2017 (see "Description of Business" above for more information).
(ii) the Augusta Credit Agreement (see "General Development of the Business – Financings" above for more information);
(iii) the Agency Agreement (see "General Development of the Business – Financings" above for more information); and
(iv) the Equity Distribution Agreement (see "General Development of the Business – Financings" above for more information).

INTERESTS OF EXPERTS

The following are names of persons or companies (a) that have prepared or certified a report, valuation statement or opinion described or included in a filing, or referred to in a filing made under NI 51-102 by the Company during, or relating to, the Company's most recently completed financial period and (b) whose profession or business gives authority to the report, valuation statement or opinion made by the person or company:

Each of Bahareh Asi, David Willock, Derick de Wit, Steven M. Trader, Todd McCracken, Deepak Malhotra, and Oliver Peters, being an independent author of the ESM Technical Report, is a "qualified person" for the purposes of NI 43-101. Each such qualified person has reviewed certain scientific and technical information relating to ESM as more fully described in this AIF or has supervised the preparation of information upon which such scientific and technical information is based as detailed in the ESM Technical Report. As of the date hereof, to the best of the Company's knowledge, the foregoing experts beneficially own, directly or indirectly, less than 1% of the outstanding securities of the Company and have no other direct or indirect interest in the Company or any of its associates or affiliates.

The auditors of the Company are Ernst & Young, LLP, Chartered Professional Accountants, of Vancouver, British Columbia. Ernst & Young, LLP, has advised the Company that it is independent within the meaning of the Rules of Professional Conduct of the Chartered Professional Accountants of British Columbia and in accordance with the applicable rules and regulations of the SEC and the Public Company Accounting Oversight Board (United States).

Qualified Person

Donald R. Taylor, MSc., PG, SME, Director and Vice Chair of the Company, a qualified person for the purposes of NI 43-101, is a co-author of the ESM Technical Report and has reviewed and approved certain scientific and technical information made in filings made by the Company under NI 51-102 in the most recently completed financial year. Mr. Taylor is a Director and officer of the Company. As of the date of this AIF, Mr. Taylor owns, beneficially, directly or indirectly, 3,471,057 common shares of the Company, nil warrants and 1,233,334 stock options, each to acquire one common share of the Company.

AUDIT COMMITTEE INFORMATION

National Instrument 52-110 – *Audit Committees* ("**NI 52-110**") requires companies to provide disclosure with respect to their audit committee including the text of the audit committee's charter, the composition of the audit committee and the fees paid to the external auditor.

The text of the audit committee's charter is attached as Schedule "A" to this AIF.

For the year ended December 31, 2025, the Company's audit committee consisted of Messrs. Boggio, Boehner and Pataki. All are independent and financially literate as defined in NI 52-110.

The following is a description of the education and experience of each member of the audit committee during the year ended December 31, 2025, that is relevant to the performance of their responsibilities as an audit committee member.

Lenard Boggio (Chair of Audit Committee) - Mr. Boggio is a former partner of PwC LLP, where he was an audit partner and the leader of the mining industry practice in British Columbia. Mr. Boggio has significant expertise in financial reporting, auditing matters and transactional support, previously assisting, amongst others, clients in the mineral resource and energy sectors, including exploration, development and production stage operations in the Americas, Africa, Europe and Asia. Mr. Boggio previously served as an independent director and audit committee chair of Blue Gold Mining Inc., Augusta Resource Corp., Armor Minerals Inc., Polaris Materials Corporation, Lithium Americas Corp., Pure Gold Mining Inc., Three Valley Copper Corp., and Augusta Gold Corp., and currently serves as an independent director and audit committee chair of Equinox Gold Corp., director and nominating and governance committee chair of Rubicon Organics Inc.. Mr. Boggio has a Bachelor of Arts Degree and an Honors Bachelor of Commerce Degree from the University of Windsor. In 1985 Mr. Boggio became a member of the Institute of Chartered Accountants of BC (ICABC, now CPA BC). Mr. Boggio was conferred with a Fellow's designation in 2007 by the ICABC for distinguished service to the profession and community and in 2018 he was awarded a Lifetime Achievement Award by CPA BC for his outstanding lifetime of service to the profession and community. He is a past president of ICABC and a past Chair of the Canadian Institute of Chartered Accountants. He is also a member of the Canadian Institute of Corporate Directors (ICD.D).

John Boehner – Mr. Boehner served as the 53rd Speaker of the United States House of Representatives from 2011 to 2015. A member of the Republican Party, Mr. Boehner was the U.S. Representative from Ohio's 8th congressional district, serving from 1991 to 2015. He previously served as the House Minority Leader from 2007 until 2011, and House Majority Leader from 2006 until 2007. Following his career in government service, Mr. Boehner joined Squire Patton Boggs, a global law and public policy firm. He earned a Bachelor of Arts in business administration from Xavier University.

George Pataki - Mr. Pataki is the co-founder and Chairman of the Pataki-Cahill Group, a specialized development firm, and serves as Senior Counsel to the international law firm Norton Rose Fullbright. Previously, he served three terms as the 53rd Governor of the State of New York from 1995 to 2006, being elected after serving consecutively as the mayor of Peekskill, an assemblyman in the New York State

Legislature, and as a senator in the New York State Senate. Mr. Pataki has significant experience serving on the boards of public and private corporations.

Pre-Approval Policies and Procedures

The audit committee has not adopted any specific policies and procedures for the engagement of non-audit services. However, under its charter, the audit committee must approve all non-audit services to be provided to the Company or its subsidiaries by the Company's external auditors.

External Auditor Service Fees

The following table sets forth the fees billed to the Company by Ernst & Young, LLP, Chartered Professional Accountants in the last two fiscal periods for services rendered:

Fiscal Period	**Audit Fees**(1) Cdn$	**Audit Related Fees**(2) Cdn$	**Tax Fees** Cdn$	**All Other Fees**(3) Cdn$
December 31, 2025	$920,145(4)	$15,000	$0	$0
December 31, 2024	$443,724	$0	$0	$0

(1) Aggregate fees billed by the Company's auditors for audit and review services.
(2) Aggregate fees billed by the Company's auditors for assurance and related services that are reasonably related to the performance of the audit or review of the Company's financial statements and not contained under "Audit Fees".
(3) Aggregate fees billed by the Company's auditors for services not contained "Audit Fees", "Audit Related Fees" or "Tax Fees".
(4) $480,145 relate to work performed in relation to the NYSE American listing and financing.

ADDITIONAL INFORMATION

Additional information about the Company may be found under the Company's profile on SEDAR+ atwww.sedarplus.ca.

Additional information, including directors' and officers' remuneration and indebtedness, principal holders of the Company's securities, and securities authorized for issuance under equity compensation plans, where applicable, will be contained in the Company's information circular for the annual meeting of shareholders involving the election of directors.

Additional financial information is provided in the Company's consolidated financial statements and management discussion & analysis for its most recently completed financial year.

SCHEDULE "A"

Attached.

TITAN MINING CORPORATION
(the "Company")

AUDIT COMMITTEE

CHARTER

The Audit Committee (the "Committee") is a committee of the Board of Directors (the "Board") of Titan Mining Corporation (the "Company") to which the Board delegates its responsibilities for the oversight of the accounting and financial reporting process and financial statement audits.

The Committee will:

(a) review and report to the Board on the following before they are published:

(i) the financial statements and MD&A (management discussion and analysis) (as defined in National Instrument 51-102) of the Company;

(ii) the auditors report, if any, prepared in relation to those financial statements; and

(iii) all other filings with regulatory authorities and any other publicly disclosed information containing the Company's financial statements, including any certification, report, opinion or review rendered by the independent accountants, and all financial information and earnings guidance intended to be provided to analysts and the public or to rating agencies, and consider whether the information contained in these documents is consistent with the information contained in the financial statements.

(b) review the Company's annual and interim earnings press releases, if any, before the Company publicly discloses this information;

(c) satisfy itself that adequate procedures are in place for the review of the Company's public disclosure of financial information extracted or derived from the Company's financial statements and periodically assess the adequacy of those procedures;

(d) select and, where applicable, replace the external auditor to be nominated for the purposes of preparing and issuing an auditor's report or performing other audit, review or attest services for the Company;

(e) approve the compensation of such external auditor;

(f) be directly responsible for overseeing the work of the external auditor engaged for the purpose of preparing or issuing an auditor's report or performing other audit, review or attest services for the Company, including the resolution of disagreements between management and the external auditor regarding financial reporting;

(g) monitor and report to the Board on the integrity of the financial reporting process and the system of internal controls that management and the Board have established;

(h) establish procedures for:

(i) the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls, or auditing matters; and

(ii) the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters.

(i) pre-approve all non-audit services to be provided to the Company or its subsidiary entities by the Company's external auditor, including as contemplated by National Instrument 52-110 and consider such fees in relation to fees for audit services as well as any risk or conflicts of such services;

(j) review and approve the Company's hiring of partners, employees and former partners and employees of the external auditor of the Company;

(k) with respect to ensuring the integrity of disclosure controls and internal controls over financial reporting, understand the process utilized by the Chief Executive Officer and the Chief Financial Officer to comply with National Instrument 52-109;

(l) review any changes proposed by management to accounting policies and report to the Board on such changes;

(m) oversee the opportunities and risks inherent in the Company's financial management and the effectiveness of the controls thereon;

(n) review major transactions (acquisitions, divestitures and funding), in respect of which a special committee of the Board is not established;

(o) review the reports of the Chief Executive Officer and Chief Financial Officer regarding any significant deficiencies or material weaknesses in the design of operation of internal controls and any fraud that involves management or other employees of the Company who have a significant role in managing or implementing the Company's internal controls and evaluate whether the internal control structure, as created and as implemented, provides reasonable assurances that transactions are recorded as necessary to permit the Company's external auditor to reconcile the Company's financial statements in accordance with applicable securities laws;

(p) review with management the adequacy of the insurance and fidelity bond coverage, reported contingent liabilities, and management's assessment of contingency planning. Review management's plans regarding any changes in accounting practices or policies and the financial impact of such changes, any major areas in management's judgment that have a significant effect upon the financial statements of the Company, and any litigation or claim, including tax assessments, that could have a material effect upon the financial position or operating results of the Company;

(q) obtain annually a formal written statement by the external auditors setting forth all relationships between the external auditors and the Company, consistent with Independence Standards Board Standard 1 and The Public Company Accounting Oversight Board Rule 3526, and confirming that the external auditors

are registered and in good standing with the Canadian Public Accounting Board and The Public Company Accounting Oversight Board; and

consider, in consultation with the external auditor, the audit scope and plan of the external auditor and approve the proposed audit fee and the final fees for the audit.

Composition of the Committee

The Committee shall be composed of at least three independent directors. Independence of the Board members will be as defined by: (i) National Instrument 52-110 - Audit Committees, Part 6, (ii) Rule 10A-3 of the United States Securities Exchange Act of 1934, as amended, and (iii) applicable stock exchange requirements, including those of Section 803(B)(2) of the NYSE American Company Guide, and in addition each committee member will have no direct or indirect relationship with the Company which, in the view of the Board, could reasonably interfere with the exercise of a member's independent judgement.

All members of the Committee must be financially literate or must become financially literate within a reasonable period of time after his or her appointment to the Committee. "Financially literate" means that such member has the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the Company's financial statements. One or more members of the Committee shall, in the judgment of the Board, have accounting or financial management expertise and be "financially sophisticated" under Section 803(B)(2) of the NYSE American Company Guide.

Appointing Members

The members of the Committee shall be appointed or re-appointed by the Board on an annual basis. Each member of the Committee shall continue to be a member thereof until such member's successor is appointed, unless such member shall resign or be removed by the Board or such member shall cease to be a director of the Company. Where a vacancy occurs at any time in the membership of the Committee, it may be filled by the Board and shall be filled by the Board if the membership of the Committee is less than three directors as a result of the vacancy or the Committee no longer has a member who has, in the judgment of the Board, accounting or financial management expertise.

Authority

The Committee has the authority to engage independent counsel and other advisors as it deems necessary to carry out its duties and the Committee will set the compensation for such advisors.

The Committee has the authority to communicate directly with and to meet with the external auditors and the internal auditor, without management involvement. This extends to requiring the external auditor to report directly to the Committee.

The Committee has the authority to approve, if so delegated by the board of directors, the interim financial statements and management discussion and analysis and to cause the filing of the same together with all required documents and information with the securities commissions and other regulatory authorities in the required jurisdictions.

The Committee shall have full access to the books, records and facilities of the Company in carrying out its responsibilities.

The Board shall adopt resolutions which provide for appropriate funding, as determined by the Committee, for (i) services provided by the external auditor in rendering or issuing an audit report or performing other audit, review or attest services for the Company, (ii) services provided by any adviser employed by the Committee which it believes, in its sole discretion, are needed to carry out its duties and responsibilities, or (iii) ordinary administrative expenses of the Committee that are necessary or appropriate in carrying out its duties and responsibilities.

Reporting

The reporting obligations of the Committee will include:

1. reporting to the Board on the proceedings of each Committee meeting and on the Committee's recommendations at the next regularly scheduled directors meeting; and

2. reviewing, and reporting to the Board on its concurrence with, the disclosure required by Form 52-110F2 in any management information circular prepared by the Company.

Meetings

The time and place of meetings of the Committee and the procedure at such meetings shall be determined from time to time by the members thereof provided that:

- A quorum for meetings shall be at least a majority of the members of the Committee, present in person or by telephone or other telecommunication device that permit all persons participating in the meeting to speak and hear each other;

- The Committee shall meet at least quarterly (or more frequently as circumstances dictate); and

- Notice of the time and place of every meeting shall be given in writing or facsimile communication to each member of the Committee and the external auditors of the Company at least 48 hours prior to the time of such meeting.

While the Committee is expected to communicate regularly with management, the Committee shall exercise a high degree of independence in establishing its meeting agenda and in carrying out its responsibilities. The Committee shall submit the minutes of all meetings of the Committee to, or discuss the matters discussed at each Committee meeting with, the Board.

The members of the Committee must elect a chair from among the members of the Committee. On request of the auditor of the Company, the chair of the Committee must convene a meeting of the Committee to consider any matter that the auditor believes should be brought to the attention of the directors or shareholders.

Approved by the Board of Directors of
Titan Mining Corporation on November 4, 2025