

This short form prospectus is a base shelf prospectus. This short form base shelf prospectus has been filed under legislation in each of the provinces and territories of Canada that permits certain information about these securities to be determined after this prospectus has become final and that permits the omission from this short form base shelf prospectus of that information. The legislation requires the delivery to purchasers of a prospectus supplement containing the omitted information within a specified period of time after agreeing to purchase any of these securities, except in cases where an exemption from such delivery requirements is available.

Information contained herein is subject to completion or amendment. A registration statement relating to these securities has been filed with the United States Securities and Exchange Commission but is not yet effective. These securities may not be sold nor may offers to buy be accepted prior to the time the registration statement becomes effective. This prospectus shall not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of securities in any state in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state.

No securities regulatory authority has expressed an opinion about these securities, and it is an offence to claim otherwise. This short form base shelf prospectus constitutes a public offering of these securities only in those jurisdictions where they may be lawfully offered for sale and therein only by persons permitted to sell such securities. See “Plan of Distribution”. Information has been incorporated by reference in this short form base shelf prospectus from documents filed with securities commissions or similar authorities in Canada. Copies of the documents incorporated herein by reference may be obtained on request without charge from the Corporate Secretary of Titan Mining Corporation at Suite 555 – 999 Canada Place, Vancouver, British Columbia, V6C 3E1, telephone 604-687-1717, and are also available electronically at www.sedarplus.ca and at www.sec.gov.

SHORT FORM BASE SHELF PROSPECTUS

New Issue and Secondary Offering

January 27, 2026



US\$150,000,000

**COMMON SHARES
DEBT SECURITIES
WARRANTS
SUBSCRIPTION RECEIPTS
UNITS**

Titan Mining Corporation (“Titan Mining” or the “Company”) may, from time to time, offer and issue the following securities: (i) common shares of the Company (“**Common Shares**”); (ii) senior or subordinated secured or unsecured debt securities (collectively, “**Debt Securities**”), which may include debt securities convertible into or exchangeable for other securities of the Company described in this short form base shelf prospectus (the “**Prospectus**”); (iii) warrants to acquire Common Shares or other securities of the Company described in this Prospectus (“**Warrants**”); (iv) subscription receipts of the Company exchangeable for Common Shares or other securities of the Company described in this Prospectus (“**Subscription Receipts**”); or (v) units comprised of one or more of the other securities described in this Prospectus (“**Units**”, and collectively with the Common Shares, Debt Securities, Warrants and Subscription Receipts, the “**Securities**”), having an aggregate offering price of up to US\$150,000,000 during the 25-month period that this Prospectus, including any amendments thereto, remains effective. The Securities may be offered separately or together, in amounts, at prices and on terms to be determined based on market conditions at the time of sale and set forth in an accompanying shelf prospectus supplement (a “**Prospectus Supplement**”).

The specific terms of the Securities offered in a particular offering will be set out in the applicable Prospectus Supplement and may include, where applicable: (i) in the case of Common Shares, the number of Common Shares offered, the offering price and any other specific terms; (ii) in the case of Debt Securities, the specific designation, aggregate principal amount, the currency or the currency unit for which the Debt Securities may be purchased, maturity, interest provisions, authorized denominations, offering price, covenants, events of default, any terms for redemption at the option of the Company or the holder, any exchange or conversion terms, whether the Debt Securities will be secured by any of the Company’s assets or guaranteed by any other person, priority or subordination of the Debt Securities to other indebtedness and any other specific terms; (iii) in the case of Warrants, the designation, number and terms of the Securities issuable upon exercise of the Warrants, any procedures that will result in the adjustment of these numbers, the exercise price, dates and periods of exercise, the currency in which the Warrants are issued and any other specific terms; (iv) in the case of Subscription Receipts, the number of Subscription Receipts

offered, the offering price, the designation, number and terms of the Securities issuable in exchange for the Subscription Receipts upon satisfaction of certain release conditions, any procedures that will result in the adjustment of these numbers, any additional payments to be made to holders of Subscription Receipts upon satisfaction of the release conditions, the terms of the release conditions, the terms governing the escrow of all or a portion of the gross proceeds from the sale of the Subscription Receipts, terms for the refund of all or a portion of the purchase price for the Subscription Receipts in the event that the release conditions are not met or any other specific terms; and (v) in the case of Units, the designation, number and terms of the Common Shares, Warrants, Debt Securities or Subscription Receipts comprising the Units. The Securities may be offered separately or together in any combination (including in the form of Units), and as separate series. Certain of the Company's securityholders (each, a "selling securityholder") may also offer and sell Securities under this Prospectus. A Prospectus Supplement may include specific variable terms pertaining to the Securities that are not within the parameters described in this Prospectus.

For greater certainty, this Prospectus may qualify the issuance of Debt Securities, including Debt Securities convertible into other Securities of the Company, in respect of which the payment of principal or interest may be determined, in whole or in part, by reference to published rates of a central banking authority or one or more financial institutions, such as a prime rate, or to recognized market benchmark interest rates. A Prospectus Supplement may include specific variable terms pertaining to the above-described Securities that are not within the alternatives or parameters set forth in this Prospectus. The Company does not intend to issue "novel" securities pursuant to this Prospectus, as such term is defined under National Instrument 44-102 – *Shelf Distributions* ("NI 44-102").

All shelf information permitted under applicable securities laws to be omitted from this Prospectus will be contained in one or more Prospectus Supplements that will be delivered to purchasers together with this Prospectus, to the extent required by applicable securities laws. Each Prospectus Supplement will be incorporated by reference into this Prospectus for the purposes of securities legislation as of the date of the Prospectus Supplement, and only for the purposes of the distribution of the Securities to which the Prospectus Supplement pertains. You should read this Prospectus and any applicable Prospectus Supplement carefully before you invest in any Securities issued pursuant to this Prospectus.

The Company is permitted under a multijurisdictional disclosure system ("MJDS") adopted by the securities regulatory authorities in Canada and the United States to prepare this Prospectus in accordance with the disclosure requirements of Canada. Prospective investors in the United States should be aware that such requirements are different from those of the United States. Financial statements included or incorporated by reference in this Prospectus have been prepared in accordance with IFRS Accounting Standards as issued by the International Accounting Standards Board ("IFRS") and thus may not be comparable to financial statements of United States companies prepared under United States generally accepted accounting principles.

The enforcement by investors of civil liabilities under U.S. federal securities laws may be affected adversely by the fact that the Company is existing under the laws of British Columbia, Canada, that some of its officers and directors are not residents of the United States, that some of the experts named herein are not residents of the United States, and that some of the assets of the Company and said persons are located outside the United States. See "*Enforceability of Civil Liabilities*".

Investors should be aware that the acquisition, holding, or disposition of the Securities described herein may have tax consequences both in the United States and in Canada. Such consequences for investors who are resident in, or citizens of, the United States and Canada may not be described fully herein. You should read the tax discussion contained in the applicable Prospectus Supplement, if any, with respect to a particular offering of the Securities and consult your own tax advisor with respect to your own particular circumstances.

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION NOR HAS THE SECURITIES COMMISSION OF ANY STATE OF THE UNITED STATES OR ANY CANADIAN SECURITIES REGULATOR APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

An investment in the Securities involves a high degree of risk. Investors or prospective investors should carefully read the "*Risk Factors*" section detailed in this Prospectus.

Certain directors and officers of the Company and certain persons for whom the Company is required to file a consent in connection herewith, reside outside of Canada. Although such persons have appointed the Company as their agent

for service of process, purchasers are advised that it may not be possible for investors to enforce judgements obtained in Canada against such persons. See “*Enforcement of Judgments Against Foreign Persons or Companies*”.

This Prospectus constitutes a public offering of the Securities only in those jurisdictions where they may be lawfully offered for sale and therein only by persons permitted to sell such Securities. The Company may offer and sell the Securities to, or through, underwriters or dealers, including by way of an “at-the-market distribution” (as defined in NI 44-102) of Common Shares (an “**ATM Distribution**”) and also may offer and sell certain of the Securities directly to other purchasers or through agents pursuant to exemptions from registration or qualification under applicable securities laws. The Prospectus Supplement relating to each issue of the Securities offered thereby will set forth the names of any underwriters, dealers or agents involved in the offering and sale of such Securities and will set forth the terms of the offering of such Securities, the method of distribution of such Securities, including, to the extent applicable, the proceeds to the Company and any fees, discounts or any other compensation payable to underwriters, dealers or agents, and any other material terms of the plan of distribution. See “*Plan of Distribution*”.

No underwriter has been involved in the preparation of, or has performed a review of, the contents of this Prospectus.

The Securities may be sold from time to time in one or more transactions at a fixed price or prices, or at non-fixed prices. If offered on a non-fixed price basis, the Securities may be offered at market prices prevailing at the time of sale, at prices related to such prevailing market prices, or at prices to be negotiated with purchasers at the time of sale, which prices may vary as between purchasers and during the period of distribution of the Securities.

In connection with any offering of the Securities (unless otherwise specified in a Prospectus Supplement), excluding an ATM Distribution, the underwriters, dealers or agents may over-allot or effect transactions which stabilize or maintain the market price of the Securities offered at a level above that which might otherwise prevail in the open market. Such transactions, if commenced, may be discontinued at any time. A purchaser who acquires Securities forming part of the underwriters’, dealers’ or agents’ over-allocation position acquires those securities under this Prospectus, regardless of whether the over-allocation position is ultimately filled through the exercise of an over-allotment option or secondary market purchases. No underwriter, dealer or agent involved in an ATM Distribution undertaken pursuant to any Prospectus Supplement, no affiliate of such underwriter, dealer or agent and no person or company acting jointly or in concert with such underwriter, dealer or agent will over-allot or effect transactions which stabilize or maintain the market price of the Common Shares offered. See “*Plan of Distribution*”.

The Common Shares are listed on the Toronto Stock Exchange (the “**TSX**”) under the stock symbol “**TI**” and on the NYSE American LLC (“**NYSE American**”) under the stock symbol “**TII**”. On January 26, 2026, the last complete trading day prior to the date of this Prospectus, the closing price of the Common Shares on the TSX was CAD\$6.74 and was US\$4.93 on the NYSE American. **Unless otherwise specified in a Prospectus Supplement, there is no market through which the Securities, other than the Common Shares, may be sold and holders may not be able to resell any of such Securities, other than the Common Shares, purchased under this Prospectus or any Prospectus Supplement. This may affect the pricing of such Securities, other than the Common Shares, on the secondary market, the transparency and availability of trading prices, the liquidity of such Securities, and the extent of issuer regulation. See “*Risk Factors*”.**

For information about the right to withdraw or rescind from an agreement to purchase Securities, see “*Purchasers’ Statutory Rights of Withdrawal and Rescission*”.

The Company’s head office is located at Suite 555 – 999 Canada Place, Vancouver, British Columbia, V6C 3E1. Its registered and records office is located at Suite 555 – 999 Canada Place, Vancouver, British Columbia, V6C 3E1.

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ABOUT THIS PROSPECTUS

This Prospectus provides a general description of the Securities that the Company may offer. Each time the Company sells any of the Securities under this Prospectus, it will provide purchasers of the Securities with a Prospectus Supplement that will contain specific information about the terms of that offering in accordance with applicable securities laws. The Prospectus Supplement may also add, update or change information contained in this Prospectus or in the documents incorporated by reference herein. Before investing in any of the Securities, you should read both this Prospectus and any applicable Prospectus Supplement together with additional information found in the documents incorporated by reference in this Prospectus under “*Documents Incorporated by Reference*”.

This Prospectus is part of a registration statement on Form F-10 (the “**U.S. Registration Statement**”) relating to the Securities that the Company has filed with the U.S. Securities and Exchange Commission (the “**SEC**”). Under the U.S. Registration Statement, the Company may, from time to time, sell Securities described in this Prospectus in one or more offerings up to an aggregate offering amount of US\$150,000,000. This Prospectus, which constitutes part of the U.S. Registration Statement, provides you with a general description of the Securities that the Company may offer. Each time the Company sells Securities under the U.S. Registration Statement, it will provide a Prospectus Supplement that will contain specific information about the terms of that offering of Securities. A Prospectus Supplement may also add, update or change information contained in this Prospectus. Before you invest, you should read both this Prospectus and any applicable Prospectus Supplement together with additional information described under the heading “*Documents Incorporated by Reference*” herein and therein. This Prospectus does not contain all of the information set forth in the U.S. Registration Statement, certain parts of which are omitted in accordance with the rules and regulations of the SEC, or the exhibits that are part of the U.S. Registration Statement. Investors in the United States should refer to the U.S. Registration Statement and the exhibits thereto for further information with respect to the Company and the Securities.

You should rely only on the information contained in or incorporated by reference into this Prospectus. The Company has not authorized anyone to provide you with different information. The Company is not making an offer of the Securities in any jurisdiction where the offer is not permitted. You should bear in mind that although the information contained in this Prospectus and any Prospectus Supplement is accurate as of any date on the front of such documents, such information may also be amended, supplemented or updated by the subsequent filing of additional documents deemed by law to be or otherwise incorporated by reference into this Prospectus and by any subsequently filed Prospectus amendments.

Unless stated otherwise or the context otherwise requires, all currency presentation, and references to dollar amounts in this Prospectus and any Prospectus Supplement are references to United States dollars and will be indicated by “\$” or “US\$”. Any reference to Canadian dollars will be indicated by “C\$” or “CAD\$”. The Company’s financial statements that are incorporated by reference into this Prospectus and any Prospectus Supplement are expressed in United States dollars and have been prepared in accordance with International Financial Reporting Standards. Unless the context otherwise requires, references in this Prospectus and any Prospectus Supplement to “Titan Mining”, the “Company”, “we”, “us” or “our” includes the Company and each of its material subsidiaries.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Prospectus and the documents incorporated by reference into this Prospectus contain “forward-looking statements” within the meaning of applicable Canadian securities laws (“**forward-looking statements**”), concerning the Company’s plans for its properties, operations and other matters. These statements relate to analyses and other information that are based on forecasts of future results, estimates of amounts not yet determinable and assumptions of management.

Statements concerning estimates of mineral resources may also be deemed to constitute forward-looking statements to the extent that they involve estimates of the mineralization that will be encountered if the property in which that mineralization is contained is developed. Any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions or future events or performance (often, but not always, using words or phrases such as “expects” or “does not expect”, “is expected”, “anticipates” or “does not anticipate”, “plans”, “estimates” or “intends”, or stating that certain actions, events or results “may”, “could”,

“would”, “might” or “will” be taken, occur or be achieved) are not statements of historical fact and may be forward-looking statements.

Forward-looking statements included or incorporated by reference in this Prospectus include, but are not limited to, estimates and statements that describe the Company’s future plans, objectives or goals, including words to the effect that the Company or management expects a stated condition or result to occur; exploration and development plans; timing of such exploration plans, and potential results of such exploration plans; recommended work programs and the expected results therefrom; the expectation that net proceeds from the sale of the Securities will be used towards exploration at the Empire State Mine including the Kilbourn Graphite Project and general corporate purposes, including funding potential future acquisitions, capital expenditures, and debt repayment; the expectation that the current working capital will be sufficient to fund current operations and capital requirements for the next 12 months; and the expectation that the Company will continue to raise necessary funds through the issuance of Securities or other types of financing.

Any such forward-looking statements are based, in part, on assumptions and factors that may change, thus causing actual results or achievements to differ materially from those expressed or implied by the forward-looking statements. Such factors and assumptions may include, but are not limited to: assumptions concerning future prices of zinc and other minerals; mineral cut-off grade or recovery rates; accuracy of mineral resource estimates and resource modeling; timing and reliability of sampling and assay data; representativeness of mineralization; timing and accuracy of metallurgical test work; anticipated political and social conditions; expected government policy, including reforms; and the ability to successfully raise additional capital.

Forward-looking statements are subject to a variety of risks and uncertainties, both general and specific, which could cause actual events or results to differ materially from those reflected in the forward-looking statements, including, without limitation: debt risk; 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 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, including environmental licences; 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; Common Share price fluctuation; global economic conditions; uncertainty of future revenues or of a return on investment; no defined mineral reserves; the speculative nature of mineral exploration and development; risk of global outbreaks and contagious diseases; risks from international operations; relationships with, and claims by, local communities and indigenous groups; permitting risk; anti-mining sentiment; failure to comply strictly with applicable laws, and regulations may have a material adverse impact on the Company’s operations or business; the inherent operational risks associated with mining, exploration and development, many of which are beyond the Company’s control; land title risk; ethics and business practices; the Company may in the future become subject to legal proceedings; the Company’s mineral assets are located outside Canada and are held indirectly through non-Canadian affiliates; commodity price risk; exchange rate fluctuations; property commitments; infrastructure; key management; conflicts of interests; uninsurable risks; information systems; public company obligations; internal controls provide no absolute assurances as to reliability of financial reporting and financial statement preparation, and ongoing evaluation may identify areas in need of improvement; the value of the Common Shares, as well as its ability to raise equity capital, may be impacted by future issuances of Common Shares; and measures to protect endangered species may adversely affect the Company’s operations, as well as those factors discussed in this Prospectus.

For additional risk factors that could cause results to differ materially from forward-looking information, see the section entitled “*Risk Factors*” below and in the Annual Information Form (as defined herein) and in the Annual

MD&A (as defined herein). Should one or more of these risks and uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described in forward-looking statements. Forward-looking statements are made based on management's informed judgement, beliefs, estimates and opinions on the date the statements are made. Other than as required by applicable law, the Company undertakes no obligation to update forward-looking statements if such judgements, beliefs, estimates and opinions or other circumstances should change. Accordingly, investors should appreciate the inherent uncertainty of, and not place undue reliance on, forward-looking statements.

NON-IFRS MEASURES

The financial statements of the Company that are incorporated by reference in this Prospectus have been prepared in accordance with IFRS Accounting Standards as issued by the International Accounting Standards Board. Certain information presented in this Prospectus, including certain documents incorporated by reference herein, may include non-IFRS Accounting Standards measures ("**non-IFRS measures**") that are used by the Company as indicators of financial performance. These financial measures do not have standardized meanings prescribed under IFRS Accounting Standards and the Company's computation may differ from similarly-named computations as reported by other entities and, accordingly, may not be comparable. These financial measures should not be considered as an alternative to, or more meaningful than, measures of financial performance as determined in accordance with IFRS Accounting Standards as an indicator of performance. The Company believes these measures may be useful supplemental information to assist investors in assessing the Company's operational performance and ability to generate cash through operations. The non-IFRS measures also provide investors with insight into the Company's decision making as the Company uses these non-IFRS measures to make financial, strategic and operating decisions.

Because non-IFRS measures do not have a standardized meaning and may differ from similarly-named computations as reported by other entities, securities regulations require that non-IFRS measures be clearly defined and qualified, reconciled with their nearest IFRS Accounting Standards measure and given no more prominence than the closest IFRS Accounting Standards measure. If non-IFRS measures are included in documents incorporated by reference herein, information regarding such non-IFRS measures are presented in the sections dealing with these financial measures in such documents.

Non-IFRS measures have important limitations as analytical tools and investors are cautioned not to consider them in isolation or place undue reliance on ratios or percentages calculated using these non-IFRS measures.

CAUTIONARY NOTE TO U.S. INVESTORS REGARDING THE USE OF MINERAL RESERVE AND MINERAL RESOURCE ESTIMATES

The Company is permitted under MJDS adopted by the securities regulatory authorities in Canada and the United States to prepare this Prospectus, including the documents incorporated by reference, in accordance with the requirements of Canadian securities laws, which differ from the requirements of United States securities laws. In particular, and without limiting the generality of the foregoing, the terms "mineral reserve", "proven mineral reserve", "probable mineral reserve", "inferred mineral resources", "indicated mineral resources", "measured mineral resources" and "mineral resources" used or referenced herein and the documents incorporated by reference herein, as applicable, and information regarding mineral properties, mineralization and estimates of mineral reserves and mineral resources are Canadian mineral disclosure terms prepared in accordance with Canadian reporting requirements, which are governed by National Instrument 43-101 — *Standards of Disclosure for Mineral Projects* ("**NI 43-101**") and the Canadian Institute of Mining, Metallurgy and Petroleum (the "**CIM**") — CIM Definition Standards on Mineral Resources and Mineral Reserves, adopted by the CIM Council, as amended (the "CIM Definition Standards"). NI 43-101 is a rule developed by the Canadian Securities Administrators that establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. Canadian standards, including NI 43-101, differ significantly from the disclosure requirements of the SEC under subpart 1300 of Regulation S-K (the "**SEC Modernization Rules**"). The Company is not required to provide disclosure on its mineral properties under the SEC Modernization Rules and provides disclosure in accordance with NI 43-101 and the CIM Definition Standards. Accordingly, information contained in this Prospectus, or the documents incorporated by reference herein, may differ significantly from the information that would be disclosed had the Company prepared the mineral resource estimates under the standards adopted under the SEC Modernization Rules. Accordingly, readers are cautioned that information regarding the Company's mineral properties, including with respect to estimates of mineral reserves and mineral

resources, contained or incorporated by reference herein are not directly comparable with, and may differ in certain material respects from, similar information disclosed by United States reporting companies that disclose information regarding mineral properties in accordance with the SEC Modernization Rules. In particular, and without limiting the generality of the foregoing, the term “resource” does not equate to the term “reserve”. Under U.S. standards under the SEC Modernization Rules, mineralization may not be classified as a “reserve” unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time the reserve determination is made. United States investors should also understand that “inferred mineral resources” have a great amount of uncertainty as to their existence and as to their economic and legal feasibility. It cannot be assumed that all or any part of an “inferred mineral resource” will ever be upgraded to a higher category. Under Canadian rules, estimates of “inferred mineral resources” may not form the basis of feasibility or pre-feasibility studies except in rare cases. Disclosure of “contained ounces” in a mineral resource estimate is permitted disclosure under NI 43-101 provided that the grade or quality and the quantity of each category is stated; however, the SEC normally only permits issuers to report mineralization that does not constitute “reserves” by SEC standards as in place tonnage and grade without reference to unit measures. The requirements of NI 43-101 for identification of “reserves” are also not the same as those of the SEC, and reserves reported in compliance with NI 43-101 may not qualify as “reserves” under SEC standards. Accordingly, information contained in this Prospectus and the documents incorporated by reference herein containing descriptions of mineral deposits may not be comparable to similar information made public by U.S. companies subject to the reporting and disclosure requirements under the U.S. federal securities laws and the rules and regulations thereunder.

CAUTIONARY NOTE TO U.S. INVESTORS REGARDING PREPARATION OF FINANCIAL STATEMENTS AND FINANCIAL INFORMATION

As a British Columbia corporation (and a “foreign private issuer” under U.S. securities laws), the Company prepares its financial statements in accordance with IFRS Accounting Standards. Consequently, all of the financial statements and financial information of the Company included or incorporated herein have been prepared in accordance with IFRS Accounting Standards, which is materially different than financial statements and financial information prepared in accordance with U.S. generally accepted accounting principles (“GAAP”). Investors in the United States should be aware that although the unaudited historical interim financial statements and audited historical annual financial statements of the Company and other financial information included or incorporated by reference in this Prospectus have been prepared in United States dollars, such financial statements and other financial information included or incorporated by reference in this Prospectus have been prepared in accordance with IFRS Accounting Standards (annual statements) and International Accounting Standard 34 (quarterly statements), which differ in certain material respects from GAAP and thus may not be comparable in all respects to financial statements and information of United States companies prepared in accordance with GAAP. The SEC has adopted rules to allow foreign private issuers, such as the Company, to prepare and file financial statements prepared in accordance with IFRS Accounting Standards without reconciliation to GAAP. Accordingly, the Company is not required to provide and will not be providing a description of the principal differences between GAAP and IFRS Accounting Standards.

CURRENCY PRESENTATION AND EXCHANGE RATE INFORMATION

The Company reports in United States dollars. Accordingly, all references to “\$”, “US\$” or “United States dollars” included or incorporated by reference in this Prospectus and in any Prospectus Supplement refer to United States dollar values, while references to “CAD\$” are to Canadian dollar values.

The following table sets out for each period indicated: (i) the high and low daily exchange rates during such period; (ii) the average daily exchange rates for such period; and (iii) the daily exchange rate in effect at the end of the period, for one United States dollar, expressed in Canadian dollars, based on the daily average exchange rates published by the Bank of Canada.

	<u>Nine Months Ended September 30, 2024</u>	<u>Nine Months Ended September 30, 2025</u>
	CAD\$	CAD\$
High	1.3858	1.4603
Low	1.3316	1.3558

Average	1.3604	1.3988
End of Period	1.3499	1.3921
	Year ended	Year ended
	December 31, 2023	December 31, 2024
	CADS	CADS
High	1.3875	1.4416
Low	1.3128	1.3316
Average	1.3497	1.3698
End of Period	1.3226	1.4389

The daily average exchange rate on January 26, 2026 as published by the Bank of Canada for the conversion of Canadian dollars into United States dollars was CAD\$1.00 equals US\$0.7298 and for the conversion of United States dollars into Canadian dollars was US\$1.00 equals CAD\$1.3702.

DOCUMENTS INCORPORATED BY REFERENCE

Information has been incorporated by reference in this Prospectus from documents filed with securities commissions or similar authorities in each of the provinces and territories of Canada (the “**Commissions**”). Copies of the documents incorporated herein by reference may be obtained on request without charge from the Corporate Secretary of the Company at Suite 555 – 999 Canada Place, Vancouver, British Columbia, V6C 3E1, telephone: 604-687-1717 and are also available electronically on the Canadian System for Electronic Document Analysis and Retrieval (“**SEDAR+**”) at www.sedarplus.ca. The Company’s filings through SEDAR+ are not incorporated by reference into this Prospectus except as specifically set forth herein.

The following documents of the Company, which have been filed with the Commissions, are specifically incorporated by reference into, and form an integral part of, this Prospectus:

- (a) the annual information form of the Company dated March 18, 2025 (the “**Annual Information Form**”) (but excluding the technical report titled “**Empire State Mines 2024 NI 43-101 Technical Report**” with an effective date of December 3, 2024 incorporated by reference therein together with the information derived from such technical report, all of which is specifically excluded and is not incorporated by reference herein);
- (b) the audited consolidated financial statements of the Company for the years ended December 31, 2024, and 2023, together with the notes thereto and the auditors’ report thereon and related management’s discussion and analysis (the “**Annual MD&A**”);
- (c) the unaudited interim condensed consolidated financial statements of the Company for the three and nine months ended September 30, 2025, and 2024, together with the notes thereto (the “**Interim Financial Statements**”) and related management’s discussion and analysis;
- (d) the management information circular of the Company dated July 9, 2025, prepared in connection with the Company’s annual general meeting of shareholders held on August 20, 2025;
- (e) the material change report dated January 14, 2025, in respect of the Company’s updated mineral resource estimate and extended mine life for the Company’s ESM zinc operations;
- (f) the material change report dated June 30, 2025, in respect of EXIM’s approval of a US\$15.8 million financing for ESM;
- (g) the material change report dated July 28, 2025, in respect of the Company entering into a credit agreement with Augusta Investments Inc. and the Company’s wholly owned subsidiary, Empire State Mines, LLC

(“ESM LLC”), entering into a definitive credit agreement with the Export Import Bank of the United States (“EXIM”);

- (h) the material change report dated September 18, 2025, in respect of the Company announcing plans to list on the NYSE American and the promotion of a new chief executive officer;
- (i) the material change report dated November 6, 2025, in respect of the consolidation of the issued and outstanding Common Shares (the “**NYSE American Consolidation**”) on the basis of one new Common Share for every 1.5 existing Common Shares in order to align the Company with United States market standards in preparation for listing on the NYSE American;
- (j) the material change report dated December 10, 2025, in respect of the results from the Company’s Preliminary Economic Assessment for the Kilbourne Graphite Project and expanded support from EXIM under the Make More in America initiative;
- (k) the material change report dated December 23, 2025, in respect of the Company’s closing of its private placement of special warrants for aggregate gross proceeds of US\$15 million (the “**Special Warrant Financing**”); and
- (l) 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**”).

Any documents of the type described in section 11.1 of Form 44-101F1 – *Short Form Prospectus* (“**Form 44-101F1**”) filed by the Company with a Commission subsequent to the date of this Prospectus and prior to the expiry of this Prospectus, or the completion of the issuance of Securities pursuant hereto, will be deemed to be incorporated by reference into this Prospectus.

In addition, to the extent that any document or information incorporated by reference into this Prospectus is included in any report on Form 6-K, Form 40-F or Form 20-F (or any respective successor form) that is filed with or furnished to or furnished to the SEC by the Company after the date of this Prospectus, such document or information shall be deemed to be incorporated by reference as an exhibit to the U.S. Registration Statement of which this Prospectus forms a part. In addition, if and to the extent expressly provided in such reports, the Company may incorporate by reference into this Prospectus documents that the Company files with or furnishes to the SEC pursuant to Section 13(a), 13(c) or 15(d) of the U.S. Securities Exchange Act of 1934, as amended (the “**U.S. Exchange Act**”). The documents of the Company filed with, or furnished to, the SEC are or will be made available through EDGAR at www.sec.gov.

Any statement contained in this Prospectus or in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Prospectus to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. The modifying or superseding statement need not state that it has modified or superseded a prior statement or include any other information set forth in the document it modifies or supersedes. The making of a modifying or superseding statement shall not be deemed an admission for any purposes that the modified or superseded statement, when made, constituted a misrepresentation, an untrue statement of a material fact or an omission to state a material fact that is required to be stated or that is necessary to make a statement not misleading in light of the circumstances in which it was made. Any statement so modified or superseded shall not constitute a part of this Prospectus, except as so modified or superseded.

The ESM Technical Report (as defined herein) is subject to certain assumptions, qualifications and procedures described therein. Reference should be made to the full text of the ESM Technical Report, which has been filed with Canadian securities regulatory authorities pursuant to NI 43-101 and is available for review on SEDAR+ under the Company’s profile at www.sedarplus.ca. If, after the date of this Prospectus, the Company is required by section 4.2(1)(j) of NI 43-101 to file a technical report to support scientific or technical information that relates to a mineral project on a property that is material to the Company, the Company will file such technical report in accordance with

section 4.2(5)(a)(i) of NI 43-101 as if the words “preliminary short form prospectus” refer to a “shelf prospectus supplement”. If such technical report relates to the Empire State Mine (as defined herein), such technical report shall supersede the ESM Technical Report, which shall be deemed to no longer be incorporated by reference into this Prospectus.

A Prospectus Supplement containing the specific terms of an offering of the Securities and other information relating to the Securities will, subject to an exemption from the delivery requirements, be delivered to purchasers of such Securities together with this Prospectus and will be deemed to be incorporated into this Prospectus as of the date of such Prospectus Supplement only for the purpose of the offering of the Securities covered by that Prospectus Supplement.

In addition, certain marketing materials (as that term is defined in applicable Canadian securities legislation) may be used in connection with a distribution of Securities under this Prospectus and the applicable Prospectus Supplement(s). Any template version of any “marketing materials” (as such term is defined in National Instrument 44-101 – *Short Form Prospectus Distributions*) filed after the date of a Prospectus Supplement and before the termination of the distribution of the Securities offered pursuant to such Prospectus Supplement (together with this Prospectus) is deemed to be incorporated by reference in such Prospectus Supplement.

Upon filing of a new annual information form and related annual consolidated financial statements with, and where required, accepted by, the applicable securities regulatory authorities during the currency of this Prospectus, the previous annual information form, including all amendments thereto, the previous annual financial statements and all unaudited condensed consolidated interim financial statements (and related management’s discussion and analysis in the interim reports for such periods), material change reports filed prior to the end of the fiscal year in which the new annual information form is filed and management information circulars filed prior to the commencement of the fiscal year in which the new annual information form is filed shall all be deemed no longer to be incorporated into this Prospectus for purposes of future offers and sales of Securities hereunder.

DOCUMENTS FILED AS PART OF THE REGISTRATION STATEMENT

The following documents have been, or will be, filed with the SEC as part of the U.S. Registration Statement, of which this Prospectus forms a part:

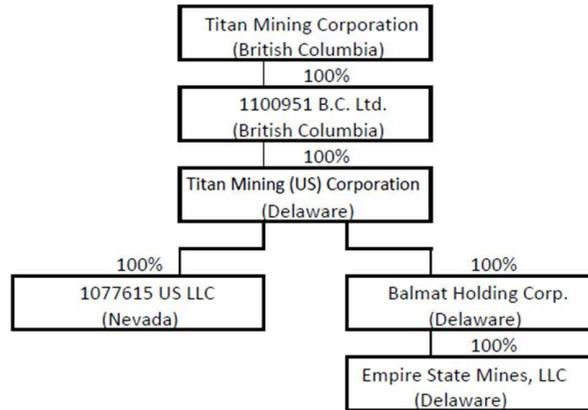
- (a) the documents listed under the heading “*Documents Incorporated by Reference*” in this Prospectus;
- (b) the consent of the Company’s independent auditor, Ernst & Young LLP;
- (c) the consent of each “qualified person” (for the purposes of NI 43-101) referred to in this Prospectus under the heading of “*Interests of Experts*”; and
- (d) the powers of attorney from directors and certain officers of the Company.

A copy of the form of any warrant indenture or warrant agency agreement, subscription receipt agreement or statement of eligibility of trustee on Form T-1, as applicable, will be filed by post-effective amendment or by incorporation by reference to documents filed with or if and to the extent expressly provided in such reports furnished to the SEC under the U.S. Exchange Act.

SUMMARY DESCRIPTION OF BUSINESS

The Company was incorporated on October 15, 2012, under the *Business Corporations Act* (British Columbia) under the name “Triton Mining Corporation”. On November 10, 2016, it changed its name to “Titan Mining Corporation”.

The following diagram illustrates the organizational structure of the Company, including its subsidiaries, as of the date of this Prospectus.



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 ESM LLC, which owns a group of high-grade zinc mines in St Lawrence County, New York. These past-producing operations include Empire State Mine’s #2, #3, #4, Hyatt, Pierpont and Edwards mines (collectively referred to as “ESM” or the “**Empire State Mine**”), which had been on care and maintenance since 2008. The Company indirectly acquired ESM on December 30, 2016 as part of its acquisition of 100% of the issued and outstanding shares of Balmat Holdings Corp. 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 17, 2017. ESM also includes the Company’s Kilbourne Graphite Project.

For additional information with respect to the Company’s business, operations and financial condition, refer to the Annual Information Form and the Annual MD&A, available on SEDAR+ at www.sedarplus.ca.

CONSOLIDATED CAPITALIZATION

The applicable Prospectus Supplement will describe any material change, and the effect of such material change, on the share and loan capitalization of the Company that will result from the issuance of the Securities pursuant to such Prospectus Supplement.

Except for: (i) the NYSE American Consolidation, where the Company consolidated the issued and outstanding Common Shares on the basis of a ratio of one new Common Share for every 1.5 existing Common Shares on November 3, 2025; and (ii) the Special Warrant Financing, where the Company issued 6,666,666 Special Warrants (as defined below) at a subscription price of USD\$2.25 per Special Warrant for aggregate proceeds to the Company of USD\$14,999,998.50, there has not been any material change in the share and loan capital of the Company, on a consolidated basis, since September 30, 2025, being the date of the Interim Financial Statements.

USE OF PROCEEDS

The use of proceeds from the sale of Securities will be described in a Prospectus Supplement relating to a specific issuance of Securities. This information will include the net proceeds to the Company from the sale of the Securities, the use of those proceeds and the specific business objectives that the Company expects to accomplish with those proceeds. As of the date of this Prospectus, the Company expects net proceeds from the sale of the Securities to be used towards the exploration and development at the Empire State Mine including the Kilbourne Graphite Project and

general corporate purposes, including funding potential future acquisitions, capital expenditures, and debt repayments. More detailed information regarding the use of proceeds from any sale of the Securities will be included in the applicable Prospectus Supplement.

Although the Company regularly engages in discussions with potential counterparties with respect to potential transactions, as of the date of this Prospectus, the Company does not have any planned acquisitions that would meet the definition of a “probable” acquisition pursuant to 10.2(2) of Form 44-101F1.

All expenses relating to an offering of the Securities and any compensation paid to underwriters, dealers or agents, as the case may be, will be paid out of the Company’s general funds, unless otherwise stated in the applicable Prospectus Supplement.

The Company expects that the current working capital will be sufficient to fund current operations and capital requirements for the next 12 months. The Company’s expectations regarding sufficient financial resources to fund the Company’s planned operations and cash requirements for at least 12 months following the date of this Prospectus is based on expectations and assumptions that reflect management’s intended courses of action for the Company and current expectations for the period covered, given management’s judgment as to the most probable set of conditions. These expectations and assumptions, although considered reasonable by management at the date of this Prospectus, may prove to be incorrect and may not materialize as expected. Subsequent to the date of this Prospectus, events and circumstances may occur that were unanticipated or that otherwise impact actual results. Accordingly, there is a significant risk that actual results achieved for this 12 month period will vary from the expected results and that such variations may be material. There is no representation that actual results achieved during this period will be the same in whole or in part as those that are currently expected. Important factors that could cause actual results to vary materially from the anticipated results. See “*Risk Factors*”.

RISK FACTORS

Investing in securities of the Company involves a significant degree of risk and must be considered speculative due to the high-risk nature of the Company’s business. The following risk factors, as well as risks currently unknown to the Company, could materially and adversely affect its future business, operations and financial condition and cause them to differ materially from the estimates described in forward-looking statements relating to the Company, or its business, property or financial results, each of which could cause purchasers of Securities to lose all or part of their investment. The risks set out below do not comprise a definitive list of all risk factors related to the Company’s business and operations. Before deciding to invest in any of the Securities, investors should consider carefully the risk factors set out below, those contained in the section entitled “*Cautionary Note Regarding Forward-Looking Statements*” above, those contained in the documents incorporated by reference in this Prospectus and any Prospectus Supplement, including those described in the Company’s annual and interim financial statements, the related notes thereto and the corresponding annual and interim management’s discussion and analysis and the Annual Information Form.

Risks Related to an Offering of Securities

An investment in the Securities is speculative.

An investment in the Securities and the Company’s prospects generally, are speculative due to the risky nature of its business and the present state of its development. Investors may lose their entire investment and should carefully consider the risk factors described below and under the heading “*Risk Factors*” in the Annual Information Form.

Management will have certain discretion concerning the use of proceeds.

While detailed information regarding the use of proceeds from the sale of the Securities will be described in the applicable Prospectus Supplement, the Company will have broad discretion over the use of net proceeds from an offering by the Company of the Securities. There may be circumstances where, for sound business reasons, a reallocation of funds may be deemed prudent or necessary. In such circumstances the net proceeds will be reallocated at the Company’s sole discretion.

Management will have discretion concerning the use of proceeds described in the applicable Prospectus Supplement as well as the timing of their expenditures. As a result, an investor will be relying on the judgment of management for the application of the proceeds. Management may use the net proceeds described in a Prospectus Supplement in ways that an investor may not consider desirable. The results and the effectiveness of the application of the proceeds are uncertain. If the proceeds are not applied effectively, the Company's results of operations may suffer.

The Company may have to raise additional capital to develop the Company's business through the issuance of additional equity, which the Company may not be able to do on favorable terms or at all.

The continued development of the Company may require additional financing. There is no guarantee that the Company will be able to achieve its business objectives. The Company intends to partially fund its business objectives by way of additional offerings of equity and/or debt financing as well as through positive cash flow from operations. The failure to raise or procure such additional funds or the failure to maintain positive cash flow could result in the delay or indefinite postponement of current business objectives. There can be no assurance that additional capital or other types of financing will be available if needed or that, if available, will be on terms acceptable to the Company. If additional funds are raised by new equity Securities, existing shareholders could suffer significant dilution, and any new equity Securities issued could have rights, preferences and privileges superior to those of holders of Common Shares. In addition, any debt financings may increase the Company's debt levels above industry standards. Any debt financing secured in the future could involve restrictive covenants relating to capital raising activities and other financial and operational matters, which may make it more difficult for the Company to obtain additional capital and to pursue business opportunities, including potential acquisitions or the disposition of assets. Debt financings may also contain provisions which, if breached, may entitle lenders or their agents to accelerate repayment of loans and/or realize upon security over the assets of the Company, and there is no assurance that the Company would be able to repay such loans in such an event or prevent the enforcement of security granted pursuant to such debt financing. The Company will require additional financing to fund its operations until positive cash flow is achieved.

There is no market for certain of the Securities.

There is currently no market through which the Securities, other than the Common Shares, may be sold and, unless otherwise specified in the applicable Prospectus Supplement, such unlisted Securities may not be listed on any securities or stock exchange or any automated dealer quotation system. As a consequence, purchasers may not be able to resell such unlisted Securities purchased under this Prospectus and a Prospectus Supplement. This may affect the pricing of the Company's Securities, other than Common Shares, in the secondary market, the transparency and availability of trading prices, the liquidity of these Securities and the extent of issuer regulation. There can be no assurance that an active trading market for the Company's Securities, other than the Common Shares, will develop or, if developed, that any such market, including for the Common Shares, will be sustained.

The market price of the Company's Common Shares may be volatile.

The market price of the Common Shares may be volatile and subject to wide fluctuations in response to numerous factors, many of which are beyond the Company's control. This volatility may affect the ability of holders of Common Shares to sell their securities at an advantageous price. Market price fluctuations in the Common Shares may be due to the Company's operating results failing to meet expectations of securities analysts or investors in any period; downward revision in securities analysts' estimates; adverse changes in general market conditions or economic trends; changes in the economic performance or market valuations of companies in the industry in which the Company operates; addition or departure of the Company's executive officers, directors and other key personnel and consultants; release or expiration of transfer restrictions on outstanding Common Shares; sales or perceived sales of additional shares; regulatory changes affecting the Company's industry generally and its business both domestically and abroad; announcements of developments and other material events by the Company or its competitors, fluctuations in the cost of vital production materials and services; changes in global financial markets, global economies, general market conditions, interest rates and volatility in the price of the Company's products which may be impacted by a variety of factors; fluctuations in the price of Common Shares that cause short sellers to enter the market; the sentiment of retail investors (including as may be expressed on financial trading and other social media sites); significant acquisitions or business combinations, strategic partnerships, joint ventures or capital commitments by or involving the Company or its competitors; operating and share price performance of other companies that purchasers deem comparable to the Company or from a lack of market comparable companies; or news reports relating to trends, concerns, technological

or competitive developments, regulatory changes and other related issues in the Company's industry or target markets; along with a variety of additional factors. These broad market fluctuations may adversely affect the market price of the Common Shares.

Financial markets have recently experienced significant price and volume fluctuations that have particularly affected the market prices of equity securities of companies and that have often been unrelated to the operating performance, underlying asset values or prospects of such companies. Accordingly, the market price of the Common Shares may decline even if the Company's operating results, underlying asset values or prospects have not changed. Additionally, these factors, as well as other related factors, may cause decreases in asset values that are deemed to be other than temporary, which may result in impairment losses. There can be no assurance that continuing fluctuations in price and volume will not occur. If such increased levels of volatility and market uncertainty continue, the Company's operations could be adversely impacted, and the trading price of the Common Shares may be materially adversely affected.

There may not be an active, liquid market for the Company's Common Shares.

There may not be an active, liquid market for the Common Shares. There is no guarantee that an active trading market for the Common Shares will be maintained on the TSX, or any other stock exchange on which the Company may list the Common Shares in the future. Investors may not be able to sell their Common Shares quickly or at the latest market price if trading in the Common Shares is not active.

If the Company is required to raise additional capital through the issuance of additional equity, this could result in dilution to shareholders.

The Company may issue additional Securities in the future, which may dilute a shareholder's holdings in the Company. The Company's articles permit the issuance of an unlimited number of Common Shares, and shareholders will have no pre-emptive rights in connection with such further issuance. The directors of the Company have discretion to determine the price and the terms of further issuances. Moreover, additional Common Shares will be issued by the Company on the exercise of options issued under the Company's stock option plan, and upon the exercise of outstanding Common Share purchase warrants. Furthermore, the Company may complete additional corporate and property acquisitions pursuant to which it may issue Common Shares or other equity as partial or full consideration for such acquisitions.

It may be difficult for certain investors to enforce foreign judgements.

Some of the Company's directors and officers reside outside of Canada. Some or all of the assets of such person may be located outside of Canada. Therefore, it may not be possible for investors to collect or to enforce judgments obtained in Canadian courts predicated upon the civil liability provisions of applicable Canadian securities laws against such persons. Moreover, it may not be possible for investors to effect service of process within Canada upon such persons.

As a foreign private issuer, the Company is subject to different U.S. securities laws and rules than a U.S. domestic issuer, which may limit the information publicly available to U.S. investors.

The Company is a "foreign private issuer" under applicable U.S. federal securities laws, and is, therefore, not subject to the same requirements that are imposed upon U.S. domestic issuers by the SEC. Under the U.S. Exchange Act, the Company is subject to reporting obligations that, in certain respects, are less detailed and less frequent than those of U.S. domestic reporting companies. As a result, the Company does not file the same reports that a U.S. domestic issuer would file with the SEC, although the Company is required to file with or furnish to the SEC the continuous disclosure documents that it is required to file in Canada under Canadian securities laws. In addition, the Company's officers, directors, and principal shareholders are exempt from the reporting and short-swing profit recovery provisions of Section 16 of the U.S. Exchange Act. Therefore, the Company's shareholders may not know on as timely a basis when the Company's officers, directors and principal shareholders purchase or sell Common Shares, as the reporting periods under the corresponding Canadian insider reporting requirements are longer. As a foreign private issuer, the Company is exempt from the rules and regulations under the U.S. Exchange Act related to the furnishing and content of proxy statements. The Company is also exempt from Regulation Fair Disclosure ("**Regulation FD**"), which prohibits issuers from making selective disclosures of material non-public information. While the Company complies with the

corresponding requirements relating to proxy statements and disclosure of material non-public information under Canadian securities laws, these requirements differ from those under the U.S. Exchange Act and Regulation FD and shareholders should not expect to receive the same information at the same time as such information is provided by U.S. domestic companies. In addition, the Company may not be required under the U.S. Exchange Act to file annual and quarterly reports with the SEC as promptly as U.S. domestic companies whose securities are registered under the U.S. Exchange Act. In addition, as a foreign private issuer, the Company has the option to follow certain Canadian corporate governance practices, except to the extent that such laws would be contrary to U.S. securities laws, and provided that the Company disclose the requirements it is not following and describe the Canadian practices it follows instead. The Company may in the future elect to follow home country practices in Canada with regard to certain corporate governance matters. As a result, the Company's shareholders may not have the same protections afforded to shareholders of U.S. domestic companies that are subject to all corporate governance requirements.

The Company may lose its foreign private issuer status in the future, which could result in significant additional costs and expenses to the Company.

In order to maintain its status as a foreign private issuer, a majority of the Company's Common Shares must be either directly or indirectly owned by non-residents of the U.S. unless the Company also satisfies one of the additional requirements necessary to preserve this status. The Company may in the future lose its foreign private issuer status if a majority of its Common Shares are held in the U.S. and if the Company fails to meet the additional requirements necessary to avoid loss of its foreign private issuer status. The regulatory and compliance costs under U.S. federal securities laws as a U.S. domestic issuer may be significantly more than the costs incurred as a Canadian foreign private issuer eligible to use MJDS. If the Company is not a foreign private issuer, it would not be eligible to use MJDS 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, and would be required to file financial statements prepared in accordance with United States GAAP. In addition, the Company may lose the ability to rely upon exemptions from corporate governance requirements of U.S. securities exchanges that are available to foreign private issuers.

The Company relies upon certain accommodations available to it as an "emerging growth company".

The Company is an "emerging growth company" as defined in Section 3(a) of the U.S. Exchange Act, and the Company will continue to qualify as an emerging growth company until the earliest to occur of: (a) the last day of the fiscal year during which the Company has total annual gross revenues of US\$1,235,000,000 (as such amount is indexed for inflation every five years by the SEC) or more; (b) the last day of the fiscal year of the Company following the fifth anniversary of the date of the first sale of common equity securities of the Company pursuant to an effective registration statement under the United States Securities Act of 1933, as amended (the "U.S. Securities Act"); (c) the date on which the Company has, during the previous three year period, issued more than US\$1,000,000,000 in non-convertible debt; and (d) the date on which the Company is deemed to be a "large accelerated filer", as defined in Rule 12b-2 under the U.S. Exchange Act. The Company will qualify as a "large accelerated filer" (and would cease to be an emerging growth company) at such time when on the last business day of its second fiscal quarter of such year the aggregate worldwide market value of its common equity held by non-affiliates will be US\$700,000,000 or more. For so long as the Company remains an emerging growth company, it is permitted to and intends to rely upon exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act. The Company cannot predict whether investors will find the Common Shares less attractive because the Company relies upon certain of these exemptions. If some investors find the Common Shares less attractive as a result, there may be a less active trading market for the Common Shares and the Common Share price may be more volatile. On the other hand, if the Company no longer qualifies as an emerging growth company, the Company would be required to divert additional management time and attention from the Company's development and other business activities and incur increased legal and financial costs to comply with the additional associated reporting requirements, which could negatively impact the Company's business, financial condition and results of operations.

Risks Related to the Company's Business

The Company has a limited operating history.

The Company has a limited operating history upon which an evaluation of the Company, its current business and its prospects can be based. Further, its sole production mineral property, ESM's #4 mine, was on care and maintenance since 2008 until recommencing operations in 2017. If the Company is unable to generate significant revenues from ESM's #4 mine, it will not be able to earn profits or continue operations. There can be no assurance that the Company will be successful in ever achieving profitable operations. 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. The Company's prospects must be considered in light of the risks, expenses and difficulties frequently encountered by single asset companies in the early stages of development, including under-capitalization, cash shortages, limitations with respect to personnel, financial and other resources, and lack of revenues.

The Company is dependent on ESM's #4 mine.

The only mineral producing property the Company has is the ESM #4 mine. Because ESM's #4 mine has a limited life based on mineral resource estimates, the Company will be required to replace and expand its mineral resources to continue production beyond the current mine life. In the absence of additional producing mineral projects, the Company will be solely dependent upon ESM's #4 mine for its revenue and profits, if any, and the Company's ability to maintain or increase its annual production will be dependent in significant part on its ability to expand its mineral resource base at ESM's #4 mine and increase throughput at ESM's #4 mine mill above its initially targeted rate.

Financial leverage and restrictive covenants may restrict the Company's 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 interest coverage ratios and 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 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 primarily 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, and therefore, a material uncertainty exists that may cast significant doubt about the Company's ability to continue as a going concern.

The Company is susceptible to 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 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. Certain other countries have, or have indicated, that they intend to impose retaliatory tariffs. While the U.S. administration recently deferred the implementation of certain tariffs pending negotiations between Canada and the U.S., there is no assurance that these negotiations will result in a successful withdrawal of the tariff proposals or a reduction in tariff rates. 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.

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.

The Company is susceptible to fluctuations in demand for, and prices of, Zinc.

As the Company's sole source of 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 #4 mine was closed and placed on care and maintenance in the fall of 2008 in the face of a general economic downturn 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. 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 and ultimately to the broader markets. Strong prices for zinc may create economic pressure to identify or create alternate technologies using substitutes for zinc that ultimately could depress future long-term demand for zinc, and at the same time may incentivize development of otherwise marginal mining properties that would compete with the Company.

The Company is ramping up mining operations.

As Titan continues to ramp up production, 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 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.

Limited supplies, supply chain disruptions, and inflation may affect the Company.

The Company's operations require skilled personnel and a supply of other resources, such as natural gas, diesel, oil and electricity. Supply may be interrupted due to a shortage or the scarce nature of inputs. Supply might also be interrupted due to transportation and logistics associated with government restrictions or regulations which delay importation of necessary items. COVID-19 has had a significant impact on global supply chains, which has impacted the Company's ability to source supplies required for the Company's operations and has increased the costs of those supplies. Global supply chains have been further strained by the current conflict between Russia and the Ukraine and could be strained further by any exacerbation of this conflict. Any interruptions to the procurement and supply of resources, or the availability of skilled personnel, as well as increasing rates of inflation, could have an adverse impact on the Company's future cash flows, earnings, results of operations, and financial condition.

The Company's current production projections and cost estimates for ESM's #4 mine 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 #4 mine 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 #4 mine 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.

The Company cannot guarantee profitability.

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 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 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 may prove to be uncertain.

The Company based its production decision 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.

There exist risks related to construction and commissioning of processing and demonstration facilities.

The design and construction of efficient processing and demonstration facilities, 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.

The Company intends to construct the Kilbourne Project facility (the “**Facility**”), which will rely on new infrastructure. It is common in new processing facilities to experience unexpected problems and delays during construction, development, start-up and commissioning activities. The costs, timing and complexities of developing 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.

The required funding and time of development may prove to be inaccurate.

There is a risk that the development of the Kilbourne Project Facility will not be completed on time or on budget, or at all. The development and construction schedule of the Kilbourne Project Facility is based on management’s expectations, and may be delayed by a number of factors, some of which are beyond the Company’s control. Most, if not all, projects of this kind suffer delays in start-up and commissioning due to late delivery of components, the inadequate availability of skilled labor and mining equipment, adverse weather or equipment failures, the rate at which expenditures are incurred, delays in construction schedules, or delays in obtaining the required permits or consents, or to obtain the required financing.

There exist risks related to the 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 other 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 and demand and other macroeconomic conditions may change.

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.

Title disputes may negatively impact the Company.

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.

Changes in surface access could impact the Company.

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.

Global economic conditions may change.

The unprecedented events in global financial markets in the past several years have had a profound impact on the global economy. Many industries, including the mining industry, are impacted by these market conditions. Market events and conditions, including disruptions in the international credit markets and other financial systems and the deterioration of global economic conditions, could impede the Company's access to capital or increase the cost of capital and may adversely affect the Company's operations.

The Company is also exposed to liquidity risks in meeting its operating and capital expenditure requirements in instances where its cash position is unable to be maintained or appropriate financing is unavailable. These factors may impact the Company's ability to obtain capital on terms favourable to it or at all. Increased market volatility may impact the Company's operations which could adversely affect the trading price of Common Shares.

Community relations disruptions may affect the Company.

Community relations are an important part of the Company's business. Developing and growing social license with the communities in which the Company operates is critical to continuing successful exploration and development. Community support for operations is a key component of a successful exploration or development project. As a business in the mining industry, the Company may come under pressure to demonstrate that other stakeholders benefit and will continue to benefit from our commercial activities. The Company may face opposition with respect to our current and future development and exploration projects which could materially adversely affect our business, results of operations, financial condition and share price. Furthermore, any inability of the Company to develop and grow its social license, or any deterioration in the Company's relationship with the local communities, could materially adversely affect our business, results of operations, financial condition and share price.

Meeting environmental laws and regulations (including in respect of climate change) may impact the Company.

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.

Legal proceedings could impact the Company.

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.

Changes in rights, concessions and permits could impact the Company.

The Company's current and anticipated future operations, including further exploration, development and production on its mineral properties, including ESM's #4 mine, 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.

Development of the tailings management facility and environmental reclamation may impact the Company.

The embankment for the tailings management facility ("TMF") at ESM's #4 mine will need to be raised to fully contain the estimated tonnage for ESM's #4 mine 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 #4 mine 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.

Changes or problems with insurance coverage could negatively impact the Company.

ESM's #4 mine is 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.

Mining companies have particular health and safety risks.

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.

The use of fixed Zinc pricing arrangements and other pricing hedges introduces risk.

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.

There exist risks related to conflicts of interests.

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.

The Company may be affected by labour and employment retention relations changes.

Production at ESM's #4 mine 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 to ESM's #4 mine may have a negative impact on the Company's business, results of operations and financial condition.

The Company must meet anti-corruption and bribery regulations, 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 CAD\$100,000. Failure to report, false reporting or structuring payments to avoid reporting may result in fines of up to CAD\$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 issues could affect the Company.

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.

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 (defined above as the “**ESM Technical Report**”). The ESM Technical Report was prepared by Donald R. Taylor, MSc., PG, Todd McCracken, P.Geo., Bahareh Asi, P.Eng., David Willock, P.Eng., Deepak Malhotra, P.Eng., Oliver Peters, MSc, P.Eng., MBA, Derick de Wit, FAusIMM, and Steven M. Trader, PG, CPG, all of whom are Qualified Persons as defined in NI 43-101. Other than Mr. Taylor (who is Vice Chair of the Company’s board of directors), all of the Qualified Persons are independent of the Company. The ESM Technical Report is incorporated by reference herein and available on the Company’s profile on SEDAR+ at www.sedarplus.ca. Capitalized terms used but not otherwise defined in this Prospectus shall have the meanings ascribed to such terms in the ESM Technical Report.

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.

Project Description

Empire State Mines, owned by Titan Mining Corporation, is located in the Balmat–Edwards– Pierrepoint 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 feet 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.

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 Pierrepoint, 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.

History, Exploration, and Drilling

Zinc

The Balmat-Edwards-Pierrepoint district consists of four mining regions (Balmat, Hyatt, Edwards, and Pierrepoint) 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 36.4 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-Pierrepoint 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.

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.

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 pHLOTTEC 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.

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-political or marketing 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. 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 or 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.

Mineral Reserve Estimates

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

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.

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

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.

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.

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 Sylvania 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 Sylvania 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 Sylvania 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 feet 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 million tons of waste rock and 6.4 million 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 gallons, expanding to 10,600 gallons 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.

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

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.

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.

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

Source: ESM 2025

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.

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: Financial analysis summary

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 Grades (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

Adjacent Properties

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

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.

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.

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 (\$)
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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
Actual 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 Item	Estimated Cost (\$)
Kilbourne Site	18,745,000
Secondary Transformation Site	7,851,600
Total Estimate	26,596,600

References

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

EARNINGS COVERAGE RATIOS

The applicable Prospectus Supplement will provide, as required, the earnings coverage ratios with respect to the issuance of the Securities pursuant to such Prospectus Supplement.

PRIOR SALES

Information in respect of the Securities that the Company issued within the previous 12 month period, including issuances of all securities convertible or exchangeable into Securities, will be provided as required in a Prospectus Supplement with respect to the issuance of Securities pursuant to such Prospectus Supplement.

TRADING PRICE AND VOLUME

The Common Shares are listed on the TSX under the stock symbol “TI” and on the NYSE American under the stock symbol “TII”. Trading price and volume information for the Securities will be provided as required in each Prospectus Supplement to this Prospectus.

DIVIDEND POLICY

All Common Shares are entitled to an equal share in the dividends declared and paid by the Company. There are no restrictions in the Company’s articles which could prevent the Company from paying dividends as long as there are no reasonable grounds for believing that the Company is insolvent or the payment of dividends would render the Company insolvent.

On December 13, 2022, the Company adopted a dividend policy to declare a quarterly cash dividend of CAD\$0.01 per common share. On June 14, 2023, the Company temporarily 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 navigated the downturn in zinc prices. The Company currently has restrictions on issuing dividends under its Credit Agreement with EXIM.

DESCRIPTION OF SHARE CAPITAL

Authorized Capital

The Company’s authorized capital consists of an unlimited number of Common Shares without par value. As of the date of this Prospectus, 91,621,438 Common Shares are issued and outstanding.

Common Shares

The holders of the Common Shares are entitled to receive notice of and to attend and vote at all meetings of the shareholders of the Company, and each Common Share confers the right to one vote in person or by proxy at all meetings of the shareholders of the Company. The holders of the Common Shares, subject to the prior rights, if any, of the holders of any other class of shares of the Company, are entitled to receive such dividends in any financial year as the Company may determine. In the event of the liquidation, dissolution or winding-up of the Company, whether voluntary or involuntary, the holders of the Common Shares are entitled to receive, subject to the prior rights, if any, of the holders of any other class of shares of the Company, the remaining property and assets of the Company. The issued Common Shares are not subject to call or assessment by the Company nor are there any pre-emptive, conversion, exchange, redemption or retraction rights attaching to the Common Shares.

Special Warrants

As of the date of this Prospectus, there are 6,666,666 special warrants (each, a “**Special Warrant**”) outstanding. Each Special Warrant was issued at a price of US\$2.25 and will, upon satisfaction of certain conditions and for no additional consideration, automatically convert into one Common Share, one half of one common share purchase warrant (each full warrant, a “**Class A Warrant**”), with each Class A Warrant having an exercise price of US\$3.04 per common

share with a term of 36 months from the date of issuance and one half of one common share purchase warrant (each, full warrant, a “**Class B Warrant**”) with each Class B Warrant having an exercise price of US\$3.71 per common share with a term of 36 months from the date of issuance.

Stock Options

As of the date of this Prospectus, there are 7,890,557 stock options granted and outstanding to purchase 7,890,557 Common Shares, with a weighted average exercise price of CAD\$0.89, and expiring periodically through to September 4, 2030.

Warrants

As of the date of this Prospectus, there are 4,000,000 Warrants outstanding to purchase 4,000,000 Common Shares, at an exercise price of CAD\$0.63 and expiring on November 1, 2028.

DESCRIPTION OF THE SECURITIES OFFERED UNDER THIS PROSPECTUS

The Company may offer Common Shares, Debt Securities, Warrants, Subscription Receipts or Units with a total value of up to US\$150,000,000 from time to time under this Prospectus, together with any applicable Prospectus Supplement, at prices and on terms to be determined by market conditions at the time of offering. This Prospectus provides a general description of the Securities the Company may offer. Each time the Company offers any of the Securities, it will provide a Prospectus Supplement that will describe the specific amounts, prices and other important terms of the Securities, including, to the extent applicable:

- designation or classification;
- aggregate offering price;
- original issue discount, if any;
- rates and times of payment of dividends or interest, if any;
- redemption, conversion or exchange terms, if any;
- conversion or exchange prices, if any, and, if applicable, any provisions for changes to or adjustments in the conversion or exchange prices and in the Securities or other property receivable upon conversion or exchange;
- restrictive covenants, if any;
- voting or other rights, if any; and
- important Canadian federal income tax considerations.

A Prospectus Supplement may also add, update or change information contained in this Prospectus or in documents the Company has incorporated by reference. However, no Prospectus Supplement will offer a Security that is not described in this Prospectus.

Description of Common Shares

The Company may offer Common Shares, which the Company may issue independently or together with Debt Securities, Warrants or Subscription Receipts, and the Common Shares may be separate from or attached to such Securities as Units. All of the Common Shares have equal voting rights, and none of the Common Shares are subject to any further call or assessment. There are no special rights or restrictions of any nature attached to any of the Common Shares, and they all rank *pari passu* each with the other as to all benefits which might accrue to the holders of the Common Shares. The Common Shares are not convertible into shares of any other class and are not redeemable or retractable.

Description of Debt Securities

The Company may issue Debt Securities that will be direct secured or unsecured obligations of the Company. The Debt Securities will be senior or subordinated indebtedness of the Company as described in the relevant Prospectus Supplement. The senior Debt Securities will rank equal in right of payment to all other unsecured and unsubordinated

indebtedness of the Company. The subordinated Debt Securities will be subordinated in right of payment to the prior payment in full of the senior Debt Securities and all other senior indebtedness of the Company.

The Debt Securities will be issued in one or more series under one or more indentures between the Company and a financial institution to which the *Trust and Loan Companies Act* (Canada) applies or a financial institution organized under the laws of any province of Canada and authorized to carry on business as a trustee (each, a “Trustee”), as supplemented and amended from time to time (each a “Trust Indenture” and, collectively, the “Trust Indentures”). The applicable Prospectus Supplement will include details of the Trust Indenture governing the Debt Securities being offered. A copy of the Trust Indenture relating to an offering of Debt Securities will be filed by the Company with the relevant Commissions and will be made available electronically on SEDAR+ after it has been entered into by the Company. The statements made in this Prospectus relating to any Trust Indenture and the Debt Securities to be issued thereunder are summaries of certain anticipated provisions thereof and do not purport to be complete and are subject to, and are qualified in their entirety by reference to, all provisions of the applicable Trust Indenture.

Any Prospectus Supplement for Debt Securities will set forth the terms and other information with respect to the Debt Securities being offered thereby, which will include, where applicable:

- the designation, aggregate principal amount and authorized denominations of such Debt Securities;
- the currency for which the Debt Securities may be purchased and the currency in which the principal and any interest is payable;
- the percentage of the principal amount at which such Debt Securities will be issued;
- whether the Debt Securities will be listed on any exchange;
- the date(s) on which such Debt Securities will mature;
- the rate(s) at which such Debt Securities will bear interest (if any), or the method of determination of such rate(s) (if any);
- the dates on which such interest will be payable and the record dates for such payments;
- the priority or subordination of the Debt Securities to other indebtedness of the Company;
- whether the Debt Securities will be secured by any of the Company’s assets or guaranteed by any other person;
- whether such Debt Securities may be converted into Common Shares or other Securities;
- the Trustee under the Trust Indenture pursuant to which the Debt Securities are to be issued;
- the terms and conditions under which the Company may be obligated to redeem, repay or purchase the Debt Securities pursuant to any sinking fund or analogous provisions or otherwise;
- the terms and conditions upon which the Company may redeem the Debt Securities, in whole or in part, at the Company’s option;
- the covenants and events of default applicable to the Debt Securities;
- any exchange or conversion terms;
- any sinking or purchase fund provisions; and
- any other specific terms or conditions of the Debt Securities.

Each series of Debt Securities may be issued at various times with different maturity dates, may bear interest at different rates and may otherwise vary.

The terms on which a series of Debt Securities may be convertible into or exchangeable for Common Shares or other Securities will be described in the applicable Prospectus Supplement. These terms may include provisions as to whether conversion or exchange is mandatory, at the option of the holder or at the option of the Company, and may include provisions pursuant to which the number of Common Shares or other Securities to be received by the holders of such series of Debt Securities would be subject to adjustment.

To the extent any Debt Securities are convertible into Common Shares or other Securities, prior to such conversion the holders of such Debt Securities will not have any of the rights of holders of the Securities into which the Debt Securities are convertible, including the right to receive payments of dividends or the right to vote such underlying Securities.

The Company reserves the right to set forth in a Prospectus Supplement specific terms of the Trust Indenture and the Debt Securities to be issued thereunder that are not within the options and parameters set forth in this Prospectus. In addition, to the extent that any particular terms of the Trust Indenture and the Debt Securities described in a Prospectus Supplement differ from any of the terms described in this Prospectus, the description of such terms set forth in this Prospectus shall be deemed to have been superseded by the description of such differing terms set forth in such Prospectus Supplement with respect to such Trust Indenture and Debt Securities.

The Company has provided an undertaking to the securities regulatory authority in each province and territory of Canada that the Company will, if any Debt Securities are distributed under this Prospectus and for so long as such Debt Securities are issued and outstanding, file the periodic and timely disclosure of any credit supporter similar to the disclosure required under section 12.1 of Form 44-101F1, unless the Company is relying on the exemption from those requirements in section 13.4 of Form 44-101F1 which require certain summary information on credit supporters. A copy of the undertaking can be viewed under the Company's profile at www.sedarplus.ca.

Description of Warrants

Warrants may be offered separately or together with other Securities, as the case may be. Each series of Warrants will be issued under a separate warrant indenture or agreement to be entered into between the Company and one or more banks, trust companies or other persons acting as warrant agent (the "**Warrant Agent**"). The applicable Prospectus Supplement will include details of the terms and conditions of the Warrants being offered. The Warrant Agent will act solely as the Company's agent and will not assume a relationship of agency with any holders of Warrant certificates or beneficial owners of Warrants.

The particular terms of each issue of Warrants will be described in the related Prospectus Supplement. This description will include, where applicable:

- the designation and aggregate number of Warrants;
- the price at which the Warrants will be offered;
- the currency or currencies in which the Warrants will be offered;
- whether the Warrants will be listed on any exchange;
- any terms, procedures and limitations relating to the transferability, exchange or exercise of the Warrants;
- the designation and terms of the Common Shares or other Securities purchasable upon exercise of the Warrants;
- the date on which the right to exercise the Warrants will commence and the date on which the right will expire;
- the number of Common Shares or other Securities that may be purchased from the Company upon exercise of each Warrant and the price at which and currency or currencies in which the Common Shares or other Securities may be purchased upon conversion of each Warrant;
- the designation and terms of any Securities with which the Warrants will be offered, if any, and the number of the Warrants that will be offered with each Security;
- the date or dates, if any, on or after which the Warrants and the related Securities will be transferable separately;
- whether the Warrants will be subject to redemption or call and, if so, the terms of such redemption or call provisions;
- material Canadian tax consequences of owning the Warrants; and
- any other material terms or conditions of the Warrants.

Prior to the exercise of their Warrants, holders of Warrants will not have any of the rights of holders of Common Shares or other Securities issuable upon exercise of the Warrants.

The Company reserves the right to set forth in a Prospectus Supplement specific terms of the Warrants that are not within the options and parameters set forth in this Prospectus. In addition, to the extent that any particular terms of the Warrants described in a Prospectus Supplement differ from any of the terms described in this Prospectus, the description of such terms set forth in this Prospectus shall be deemed to have been superseded by the description of such differing terms set forth in such Prospectus Supplement with respect to such Warrants. Warrants may also be issued without the benefit of an indenture, under a warrant certificate, which will itself contains the terms of the Warrants.

Description of Subscription Receipts

The Company may issue Subscription Receipts, which will entitle holders to receive in exchange for such Subscription Receipts upon satisfaction of certain release conditions and for no additional consideration, Common Shares, Debt Securities, Warrants or Units or a combination thereof. Subscription Receipts will be issued pursuant to one or more subscription receipt agreements (each, a “**Subscription Receipt Agreement**”) entered into between the Company and an escrow agent (the “**Escrow Agent**”), which will establish the terms and conditions of the Subscription Receipts. Each Escrow Agent will be a financial institution organized under the laws of Canada or a province thereof, and authorized to carry on business as a trustee. The Company will file on SEDAR+ a copy of any Subscription Receipt Agreement after the Company has entered into it.

The following description sets forth certain general terms and provisions of Subscription Receipts and is not intended to be complete. The statements made in this Prospectus relating to any Subscription Receipt Agreement and Subscription Receipts to be issued thereunder are summaries of certain anticipated provisions thereof and are subject to, and are qualified in their entirety by reference to, all provisions of the applicable Subscription Receipt Agreement and the Prospectus Supplement describing such Subscription Receipt Agreement. The Company urges all investors to read the applicable Prospectus Supplement related to the particular Subscription Receipts that the Company sells under this Prospectus, as well as the complete Subscription Receipt Agreement.

The Prospectus Supplement and the Subscription Receipt Agreement for any Subscription Receipts the Company offers will describe the specific terms of the Subscription Receipts and may include, but are not limited to, any of the following:

- the designation and aggregate number of Subscription Receipts offered;
- the price at which the Subscription Receipts will be offered;
- the currency or currencies in which the Subscription Receipts will be offered;
- the designation, number and terms of the Common Shares, Debt Securities, Warrants or Units or combination thereof to be received by holders of Subscription Receipts in exchange for such Subscription Receipts upon satisfaction of the release conditions, and the procedures that will result in the adjustment of those numbers;
- the conditions (the “**Release Conditions**”) that must be met in order for holders of Subscription Receipts to receive in exchange for such Subscription Receipts for no additional consideration Common Shares, Debt Securities, Warrants or Units or a combination thereof;
- the procedures for the issuance and delivery of Common Shares, Debt Securities, Warrants or Units or a combination thereof to holders of Subscription Receipts in exchange for such Subscription Receipts upon satisfaction of the Release Conditions;
- the dates or periods during which the Subscription Receipts may be exchanged into Common Shares, Debt Securities, Warrants or Units or a combination thereof;
- whether any payments will be made to holders of Subscription Receipts upon delivery of the Common Shares, Debt Securities, Warrants or Units or a combination thereof in exchange for such Subscription Receipts upon satisfaction of the Release Conditions (e.g., an amount equal to dividends declared on Common Shares by the Company to holders of record during the period from the date of issuance of the Subscription Receipts to the date of issuance of any Common Shares pursuant to the terms of the Subscription Receipt Agreement);
- the terms and conditions under which the Escrow Agent will hold all or a portion of the gross proceeds from the sale of Subscription Receipts, together with interest and income earned thereon (collectively, the “**Escrowed Funds**”), pending satisfaction of the Release Conditions;
- the terms and conditions pursuant to which the Escrow Agent will hold Common Shares, Debt Securities, Warrants or Units or a combination thereof pending their exchange for Subscription Receipts upon satisfaction of the Release Conditions;
- the terms and conditions under which the Escrow Agent will release all or a portion of the Escrowed Funds to the Company upon satisfaction of the Release Conditions;
- if the Subscription Receipts are sold to or through underwriters or agents, the terms and conditions under which the Escrow Agent will release a portion of the Escrowed Funds to such underwriters or agents in payment of all or a portion of their fees or commission in connection with the sale of the Subscription Receipts;

- procedures for the refund by the Escrow Agent to holders of Subscription Receipts of all or a portion of the subscription price for their Subscription Receipts, plus any *pro rata* entitlement to interest earned or income generated on such amount, if the Release Conditions are not satisfied;
- any contractual right of rescission to be granted to initial purchasers of Subscription Receipts in the event this Prospectus, the Prospectus Supplement under which Subscription Receipts are issued or any amendment hereto or thereto contains a misrepresentation;
- any entitlement of the Company to purchase the Subscription Receipts in the open market by private agreement or otherwise;
- provisions as to modification, amendment or variation of the Subscription Receipt Agreement or any rights or terms attaching to the Subscription Receipts;
- the identity of the Escrow Agent;
- whether the Subscription Receipts will be listed on any exchange;
- material Canadian federal tax consequences of owning the Subscription Receipts; and
- any other material terms or conditions of the Subscription Receipts.

The holders of Subscription Receipts will not be shareholders of the Company. Holders of Subscription Receipts are entitled only to receive Common Shares, Debt Securities, Warrants or Units or a combination thereof on exchange of their Subscription Receipts, plus any cash payments provided for under the Subscription Receipt Agreement, if the Release Conditions are satisfied. If the Release Conditions are not satisfied, the holders of Subscription Receipts shall be entitled to a refund of all or a portion of the subscription price therefor and all or a portion of the *pro rata* share of interest earned or income generated thereon, as provided in the Subscription Receipt Agreement.

The Company reserves the right to set forth in a Prospectus Supplement specific terms of the Subscription Receipts that are not within the options and parameters set forth in this Prospectus. In addition, to the extent that any particular terms of the Subscription Receipts described in a Prospectus Supplement differ from any of the terms described in this Prospectus, the description of such terms set forth in this Prospectus shall be deemed to have been superseded by the description of such differing terms set forth in such Prospectus Supplement with respect to such Subscription Receipts.

Description of Units

The Company may issue Units comprised of one or more of the other Securities described in this Prospectus in any combination. Each Unit will be issued so that the holder of the Unit is also the holder of each Security included in the Unit. Thus, the holder of a Unit will have the rights and obligations of a holder of each included Security. The Unit agreement, if any, under which a Unit is issued may provide that the Securities comprising the Unit may not be held or transferred separately, at any time or at any time before a specified date.

The particular terms of each issue of Units will be described in the related Prospectus Supplement. This description will include, where applicable:

- the designation and aggregate number of Units offered;
- the price at which the Units will be offered;
- if other than Canadian dollars, the currency or currency unit in which the Units are denominated;
- whether the Units will be listed on any exchange;
- the terms of the Units and of the Securities comprising the Units, including whether and under what circumstances those Securities may be held or transferred separately;
- the number of Securities that comprise each Unit and, for income tax purposes, how the purchase price paid for the Units is to be allocated among such component Securities;
- any provisions for the issuance, payment, settlement, transfer or exchange of the Units or of the Securities comprising the Units; and
- any other material terms, conditions and rights (or limitations on such rights) of the Units.

The Company reserves the right to set forth in a Prospectus Supplement specific terms of the Units that are not within the options and parameters set forth in this Prospectus. In addition, to the extent that any particular terms of the Units described in a Prospectus Supplement differ from any of the terms described in this Prospectus, the description of such

terms set forth in this Prospectus shall be deemed to have been superseded by the description of such differing terms set forth in such Prospectus Supplement with respect to such Units.

DENOMINATIONS, REGISTRATION AND TRANSFER

The Securities will be issued in fully registered form without coupons attached in either global or definitive form and in denominations and integral multiples as set out in the applicable Prospectus Supplement (unless otherwise provided with respect to a particular series of Debt Securities pursuant to the provisions of the applicable Trust Indenture). Other than in the case of book-entry only securities, the Securities may be presented for registration of transfer (with the form of transfer endorsed thereon duly executed) in the city specified for such purpose at the office of the registrar or transfer agent designated by the Company for such purpose with respect to any issue of the Securities referred to in the Prospectus Supplement. No service charge will be made for any transfer, conversion or exchange of the Securities, but the Company may require payment of a sum to cover any transfer tax or other governmental charge payable in connection therewith. Such transfer, conversion or exchange will be caused upon such registrar or transfer agent being satisfied with the documents of title and the identity of the person making the request. If a Prospectus Supplement refers to any registrar or transfer agent designated by the Company with respect to any issue of the Securities, the Company may at any time rescind the designation of any such registrar or transfer agent and appoint another in its place or approve any change in the location through which such registrar or transfer agent acts.

In the case of book-entry only Securities, a global certificate or certificates representing the Securities will be held by a designated depository for its participants. The Securities must be purchased or transferred through such participants, which includes securities brokers and dealers, banks and trust companies. The depository will establish and maintain book-entry accounts for its participants acting on behalf of holders of the Securities. The interests of such holders of Securities will be represented by entries in the records maintained by the participants. Holders of Securities issued in book-entry only form will not be entitled to receive a certificate or other instrument evidencing their ownership thereof, except in limited circumstances. Each holder will receive a customer confirmation of purchase from the participants from which the Securities are purchased in accordance with the practices and procedures of that participant.

SELLING SECURITYHOLDERS

This Prospectus may also, from time to time, relate to the offering of Securities by way of a secondary offering by one or more selling securityholders. The terms under which the securities will be offered by selling securityholders will be described, as required by applicable securities laws, in the applicable Prospectus Supplement. If a selling securityholder is a company, partnership, trust or other unincorporated entity, the Prospectus Supplement will include the name of each individual who, through ownership of or control or direction over the securities of that company, trust or other unincorporated entity, or membership in the partnership, as the case may be, is a principal securityholder of that entity. The Prospectus Supplement for, or including, any offering of the securities by selling securityholders will include, without limitation, where applicable:

- the names of the selling securityholders;
- the number or amount of securities owned, controlled or directed by each of the selling securityholders;
- the number or amount of securities being distributed for the account of each selling securityholder;
- the number or amount of securities to be owned, controlled or directed by each of the selling securityholders after the distribution, and the percentage that number or amount represents out of the total number or amount of outstanding securities of the class or series being distributed;
- whether the securities of the Company are owned by each of the selling securityholders both of record and beneficially, of record only or beneficially only;
- if a selling securityholder purchased any of the securities being distributed pursuant to the prospectus supplement in the two years preceding the date of the Prospectus Supplement, the date or dates the selling securityholder acquired such securities; and
- if a selling securityholder acquired the securities being distributed pursuant to the prospectus supplement in the 12 months preceding the date of the prospectus supplement, the cost thereof to the Selling Securityholder in the aggregate and on an average cost-per-security basis.

PLAN OF DISTRIBUTION

New Issue

The Company may sell the Securities to or through underwriters or dealers, and also may sell Securities to one or more other purchasers directly or through agents. Each Prospectus Supplement will set forth the terms of the offering, including the name or names of any underwriters, dealers or agents, the purchase price or prices of the Securities and the proceeds to the Company from the sale of the Securities. Only those underwriters, dealers or agents named in a Prospectus Supplement will be the underwriters, dealers or agents in connection with the Securities offered thereby.

The Securities may be sold, from time to time, in one or more transactions at a fixed price or prices which may be changed or at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at negotiated prices, including sales of Common Shares in transactions deemed to be ATM Distributions, including sales made directly on the TSX or other existing markets for the Securities. Additionally, this Prospectus and any Prospectus Supplement may also cover the initial resale of the Securities purchased pursuant thereto. The prices at which the Securities may be offered may vary as between purchasers and during the period of distribution. If, in connection with the offering of Securities at a fixed price or prices, the underwriters have made a *bona fide* effort to sell all of the Securities at the initial offering price fixed in the applicable Prospectus Supplement, the public offering price may be decreased and thereafter further changed, from time to time, to an amount not greater than the initial public offering price fixed in such Prospectus Supplement, in which case the compensation realized by the underwriters will be decreased by the amount that the aggregate price paid by purchasers for the Securities is less than the gross proceeds paid by the underwriters to the Company.

No underwriter, dealer or agent involved in an ATM Distribution, no affiliate of such underwriter, dealer or agent and no person acting jointly or in concert with such underwriter, dealer or agent has over-allotted, or will over allot, the Common Shares in connection with an ATM Distribution or effect any other transactions that are intended to stabilize the market price of Common Shares during an ATM Distribution. In connection with any offering of Securities, other than an ATM Distribution, the underwriters, dealers or agents may over-allot or effect transactions which stabilize or maintain the market price of the Securities offered at a level above that which might otherwise prevail in the open market. Such transactions, if commenced, may be discontinued at any time.

Unless otherwise specified in a Prospectus Supplement, there is no market through which Debt Securities, Warrants, Subscription Receipts or Units may be sold, and holders may not be able to resell any such Securities purchased under this Prospectus or any Prospectus Supplement. Unless otherwise specified in the applicable Prospectus Supplement, the Securities (excluding any Common Shares) will not be listed on any securities exchange. This may affect the pricing of such Securities on the secondary market, the transparency and availability of trading prices, the liquidity of the Securities, and the extent of issuer regulation. See “Risk Factors”.

In connection with the sale of the Securities, underwriters, dealers and agents may receive compensation from the Company or from purchasers of the Securities from whom they may act as agents in the form of discounts, concessions or commissions. Any such commissions will be paid out of the Company’s general funds. Underwriters, dealers and agents that participate in the distribution of the Securities may be deemed to be underwriters, and any discounts or commissions received by them from the Company and any profit on the resale of the Securities by them may be deemed to be underwriting discounts and commissions under applicable securities legislation.

Underwriters, dealers and agents who participate in the distribution of the Securities may be entitled under agreements to be entered into with the Company to indemnification by the Company against certain liabilities, including liabilities under the Canadian securities legislation, or to contribution with respect to payments which such underwriters, dealers or agents may be required to make in respect thereof. Those underwriters, dealers and agents may be customers of, engage in transactions with, or perform services for, the Company in the ordinary course of business.

Secondary Offering

This Prospectus may also, from time to time, relate to the offering of Securities by certain selling securityholders.

The selling securityholders may sell all or a portion of Securities beneficially owned by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If Securities are sold through underwriters or broker-dealers, the selling securityholders will be responsible for underwriting discounts or commissions or agent's commissions. Securities may be sold by the selling securityholders in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions, as follows:

- on any national securities exchange or quotation service on which the Securities may be listed or quoted at the time of sale;
- in the over-the-counter market;
- in transactions otherwise than on these exchanges or systems or in the over-the-counter market;
- through the writing of options, whether such options are listed on an options exchange or otherwise;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales;
- sales pursuant to Rule 144 under the U.S. Securities Act;
- broker-dealers may agree with the selling securityholders to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

If the selling securityholders effect such transactions by selling Securities to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the selling securityholders or commissions from purchasers of Securities for whom they may act as agent or to whom they may sell as principal (which discounts, concessions or commissions as to particular underwriters, broker-dealers or agents may be in excess of those customary in the types of transactions involved). In connection with sales of Securities or otherwise, the selling securityholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of Securities in the course of hedging in positions they assume. The selling securityholders may also sell Securities short and deliver Securities covered by this Prospectus to close out short positions and to return borrowed shares in connection with such short sales. The selling securityholders may also loan or pledge Securities to broker-dealers that in turn may sell such shares.

The selling securityholders may pledge or grant a security interest in some or all of the Securities owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell Securities from time to time pursuant to this Prospectus or any Prospectus Supplement, amending, if necessary, the list of selling securityholders to include, pursuant to a prospectus amendment or Prospectus Supplement, the pledgee, transferee or other successors in interest as selling securityholders under this Prospectus. The selling securityholders also may transfer and donate Securities in other circumstances in which case the transferees, donees, pledgees or other successor in interest will be the selling beneficial owners for purposes of this Prospectus.

The selling securityholders and any broker-dealer participating in the distribution of Securities may be deemed to be "underwriters" within the meaning of the U.S. Securities Act, and any commission paid, or any discounts or concessions allowed to, any such broker-dealer may be deemed to be underwriting commissions or discounts under the U.S. Securities Act. At the time a particular offering of Securities is made, a Prospectus Supplement, if required, will be distributed which will identify the selling securityholders, set forth the aggregate amount of Securities being offered and the terms of the offering, including the name or names of any broker-dealers or agents, any discounts, commissions and other terms constituting compensation from the selling securityholders and any discounts, commissions or concessions allowed or re-allowed or paid to broker-dealers.

Under the securities laws of some states, Securities may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states Securities may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that any securityholder will sell any or all of Securities registered pursuant to the registration statement, of which this Prospectus forms a part.

The selling securityholders and any other person participating in such distribution will be subject to applicable provisions of Canadian securities legislation and the U.S. Exchange Act and the rules and regulations thereunder, including, without limitations, Regulation M under the U.S. Exchange Act, which may limit the timing of purchases and sales of any Securities by the selling securityholders and any other participating person. Regulation M may also restrict the ability of any person engaged in the distribution of Securities to engage in market-making activities with respect to Securities. All of the foregoing may affect the marketability of Securities and the ability of any person or entity to engage in market-making activities with respect to Securities.

Once sold under the shelf registration statement, of which this Prospectus forms a part, Securities will be freely tradable in the hands of persons other than our affiliates.

TAXATION

Owning or holding any of the Securities may subject holders to tax consequences in Canada, the United States and elsewhere.

Although the applicable Prospectus Supplement may describe certain Canadian and/or United States federal income tax consequences of the acquisition, ownership and disposition of any of the Securities offered under this Prospectus by an initial investor, the Prospectus Supplement may not describe these tax consequences fully. Each investor should consult their own tax advisor with respect to such investor's particular circumstances.

EXEMPTION UNDER SECURITIES LAWS

The Company has applied for an exemption pursuant to section 11.1 of NI 44-102 requesting relief in the province of British Columbia from the requirement under section 6.3(1)(3) of NI 44-102 to include a prospectus certificate signed by each agent or underwriter who, with respect to the offering of Securities under this Prospectus, is in a contractual relationship with the Company to the extent that such party is not a registered dealer in any Canadian jurisdiction (a "**Foreign Dealer**"). Accordingly, such Foreign Dealer would not, directly or indirectly, make any offers or sales to persons in a province or territory in Canada. All sales of Securities pursuant to any Prospectus Supplement under this Prospectus to persons in a province or territory of Canada would solely be made through other agents or underwriters that are duly registered in the applicable Canadian jurisdictions where any offer of Securities will be made (the "**Canadian Dealers**"); and the Prospectus Supplement would include a certificate signed by each Canadian Dealer in compliance with section 6.3(1)(3) of NI 44-102. The granting of the exemption in the province of British Columbia will be evidenced by issuance of a receipt in respect of the Prospectus.

Pursuant to a decision of the Autorité des marchés financiers ("**AMF**") dated December 18, 2025, the Company was granted exemptive relief from the requirement that this Prospectus as well as the documents incorporated by reference herein and any applicable Prospectus Supplement and the documents incorporated by reference therein to be filed in relation to an ATM Distribution be filed with the AMF in the French language. This exemptive relief is granted on the condition that this Prospectus, any applicable Prospectus Supplement and the documents incorporated by reference herein and therein be filed with the AMF in the French language if the Company offers Securities to Québec purchasers in connection with an offering other than in relation to an ATM Distribution.

AUDITORS, TRANSFER AGENT AND REGISTRAR

The Company's auditors are Ernst & Young LLP ("**EY**") located at 1133 Melville St, Suite 1900, Vancouver, British Columbia V6E 4E5. EY has confirmed that they are independent of the Company 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).

The Company's registrar and transfer agent for its Common Shares is Computershare Investor Services located at 510 Burrard St. 3rd Floor, Vancouver, British Columbia, V6C 3B9.

INTEREST OF EXPERTS

The following are the names of each person or company who has prepared or certified a report, valuation, statement or opinion in this Prospectus, either directly or in a document incorporated by reference, and whose profession or business gives authority to the report, valuation, statement or opinion made by the person or company (collectively, the "Experts"):

Name of Individual or Company	Report, Valuation, Statement or Opinion
Bahareh Asi, P.Eng.	Prepared or approved scientific and technical information referenced in this Prospectus.
David Willock, P.Eng.	Prepared or approved scientific and technical information referenced in this Prospectus.
Derick de Wit, FAusIMM	Prepared or approved scientific and technical information referenced in this Prospectus.
Steven M. Trader, PG, CPG	Prepared or approved scientific and technical information referenced in this Prospectus.
Donald R. Taylor, MSc., PG, Vice Chair of the Company	Prepared or approved scientific and technical information referenced in this Prospectus.
Todd McCracken, P.Geo	Prepared or approved scientific and technical information referenced in this Prospectus.
Deepak Malhotra, P.Eng.	Prepared or approved scientific and technical information referenced in this Prospectus.
Oliver Peters, MSc, P.Eng., MBA	Prepared or approved scientific and technical information referenced in this Prospectus.

Information regarding additional experts is contained in the Annual Information Form under the heading "Interests of Experts".

To the knowledge of the Company, each of Bahareh Asi, David Willock, Derick de Wit, Steven M. Trader, Todd McCracken, Deepak Malhotra and Oliver Peters, each independent of the Company, and their respective associates or affiliates, as of the date of the applicable report, valuation, statement or opinion referred to in the table above, beneficially own, directly or indirectly, less than one percent of the outstanding Common Shares of the Company.

Donald R. Taylor is a director and officer of the Company. As of the date of this Prospectus, Mr. Taylor owns, beneficially, directly or indirectly, 3,471,057 common shares of the Company, nil warrants and 1,233,333 stock options, each to acquire one common share of the Company.

ENFORCEMENT OF JUDGMENTS AGAINST FOREIGN PERSONS OR COMPANIES

The following persons reside outside of Canada or, in the case of companies, are incorporated, continued or otherwise organized under the laws of a foreign jurisdiction and each has appointed an agent listed below, if applicable, for service of process in Canada. Purchasers are advised that it may not be possible for investors to enforce judgments obtained in Canada against any person or company that is incorporated, continued or otherwise organized under the laws of a foreign jurisdiction, or resides outside of Canada, even if the party has appointed an agent for service of process.

Name of Person	Name and Address of Agent
Rita Adiani <i>Director</i>	Titan Mining Corporation Suite 555 – 999 Canada Place, Vancouver, British Columbia, V6C 3E1
John Boehner <i>Director and Audit Committee Member</i>	Titan Mining Corporation Suite 555 – 999 Canada Place, Vancouver, British Columbia, V6C 3E1
William Mulrow <i>Director</i>	Titan Mining Corporation Suite 555 – 999 Canada Place, Vancouver, British Columbia, V6C 3E1
George Pataki <i>Director and Audit Committee Member</i>	Titan Mining Corporation Suite 555 – 999 Canada Place, Vancouver, British Columbia, V6C 3E1
Donald R. Taylor <i>Vice Chair</i>	Titan Mining Corporation Suite 555 – 999 Canada Place, Vancouver, British Columbia, V6C 3E1
Deepak Malhotra <i>Qualified Person</i>	Titan Mining Corporation Suite 555 – 999 Canada Place, Vancouver, British Columbia, V6C 3E1
Derick de Wit <i>Qualified Person</i>	Titan Mining Corporation Suite 555 – 999 Canada Place, Vancouver, British Columbia, V6C 3E1
Steven M. Trader <i>Qualified Person</i>	Titan Mining Corporation Suite 555 – 999 Canada Place, Vancouver, British Columbia, V6C 3E1

WHERE YOU CAN FIND ADDITIONAL INFORMATION

The Company is required to file with the securities commission or authority in each of the applicable provinces and territories of Canada annual and quarterly reports, material change reports and other information. In addition, the Company is subject to the informational requirements of the U.S. Exchange Act, and, in accordance with the U.S. Exchange Act, the Company also files reports with, and furnishes other information to, the SEC. Under MJDS adopted by the United States and Canada, these reports and other information (including financial information) may be prepared in accordance with the disclosure requirements of Canada, which differ in certain respects from those in the United States. As a “foreign private issuer” (under U.S. securities laws), the Company is exempt from the rules under the U.S. Exchange Act prescribing the furnishing and content of proxy statements, and the Company’s officers and directors are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the U.S. Exchange Act. The Company is also exempt from Regulation FD, which prohibits issuers from making selective disclosures of material non-public information. In addition, the Company is not required to publish financial statements as promptly as U.S. companies. Furthermore, as a foreign private issuer, the Company has the option to follow certain Canadian corporate governance practices, except to the extent that such laws would be contrary to U.S. securities laws, and provided that the Company disclose the requirements it is not following and describe the Canadian practices it follows instead.

Documents filed with, or furnished to, the SEC are available through EDGAR at www.sec.gov. The Company’s Canadian public disclosure is available on SEDAR+ and can be viewed at www.sedarplus.ca under the Company’s issuer profile. Unless specifically incorporated by reference herein, documents filed or furnished by the Company on SEDAR+ or EDGAR are neither incorporated in nor part of this Prospectus.

ENFORCEMENT OF CIVIL LIABILITIES

The Company is organized under the laws of British Columbia, Canada and its principal place of business is outside the United States. Some of the directors and officers of the Company and the experts named under “*Interest of Experts*” herein are resident outside of the United States and some of the Company’s assets and the assets of such persons are

located outside of the United States. Consequently, it may be difficult for United States investors to effect service of process within the United States on the Company, such directors or officers or such experts, or to realize in the United States on judgments of courts of the United States predicated on civil liabilities under the U.S. Securities Act. Investors should not assume that Canadian courts would enforce judgments of United States courts obtained in actions against the Company or such persons predicated on the civil liability provisions of the United States federal securities laws or the securities or “blue sky” laws of any state within the United States or would enforce, in original actions, liabilities against the Company or such persons predicated on the United States federal securities or any such state securities or “blue sky” laws.

The Company filed with the SEC, concurrently with the U.S. Registration Statement, an appointment of agent for service of process on Form F-X. Under the Form F-X, the Company appointed C T Corporation System, with an address at 28 Liberty Street, New York, New York 10005, as its agent for service of process in the United States in connection with any investigation or administrative proceeding conducted by the SEC, and any civil suit or action brought against or involving the Company in a United States court arising out of or related to or concerning the offering of Securities under the U.S. Registration Statement.

PURCHASERS’ STATUTORY RIGHTS OF WITHDRAWAL AND RESCISSION

Unless provided otherwise in a Prospectus Supplement, the following is a description of a purchaser’s statutory rights with respect to a purchase of Securities under this Prospectus.

Securities legislation in certain of the provinces and territories of Canada provides purchasers with the right to withdraw from an agreement to purchase securities and with remedies for rescission or, in some jurisdictions, revisions of the price, or damages if this Prospectus, the relevant Prospectus Supplement or an amendment thereto relating to Securities purchased by a purchaser are not sent or delivered to the purchaser. This right may be exercised within two business days after receipt or deemed receipt of a prospectus and any amendment. However, purchasers of Common Shares distributed under an at-the-market distribution do not have the right to withdraw from an agreement to purchase the securities and do not have remedies of rescission or, in some jurisdictions, revisions of the price, or damages for non-delivery of this Prospectus, the relevant Prospectus Supplement or an amendment thereto relating to the securities purchased by such purchaser because this Prospectus, the relevant Prospectus Supplement or an amendment thereto relating to the securities purchased by such purchaser will not be sent or delivered, as permitted under Part 9 of NI 44-102.

Securities legislation in some provinces and territories of Canada further provides purchasers with remedies for rescission or, in some jurisdictions, revisions of the price or damages if this Prospectus, the relevant Prospectus Supplement or an amendment thereto relating to Securities purchased by a purchaser contains a misrepresentation or is not delivered to the purchaser. Those remedies must be exercised by the purchaser within the time limit prescribed by securities legislation. Any remedies under securities legislation that a purchaser of Common Shares distributed under an at-the-market distribution may have against the Company or its agents for rescission or, in some jurisdictions, revisions of the price, or damages if this Prospectus, the relevant Prospectus Supplement or an amendment thereto relating to Securities purchased by a purchaser contain a misrepresentation will remain unaffected by the non-delivery of the prospectus referred to above.

Original purchasers of Securities under this Prospectus (as supplemented or amended) that are convertible, exchangeable or exercisable for other securities of the Company will be granted a contractual right of rescission against the Company in respect of the conversion, exchange or exercise of such Securities. The contractual right of rescission will entitle such original purchasers to receive, in addition to the original amount paid for such Securities, the amount paid upon conversion, exchange or exercise, upon surrender of the underlying securities gained thereby, in the event that this Prospectus, the relevant Prospectus Supplement or an amendment thereto contains a misrepresentation, provided that (i) the conversion, exchange or exercise takes place within 180 days of the date of the purchase of such Securities under this Prospectus and the applicable Prospectus Supplement; and (ii) the right of rescission is exercised within 180 days of the date of the purchase of such Securities under this Prospectus and the applicable Prospectus Supplement. This contractual right of rescission will be consistent with the statutory right of rescission described under section 131 of the *Securities Act* (British Columbia), and is in addition to any other right or remedy available to original purchasers under section 131 of the *Securities Act* (British Columbia) or otherwise at law.

In an offering of Units, Warrants, Debt Securities or Subscription Receipts, to the extent such securities are convertible, exchangeable or exercisable securities, original purchasers are cautioned that the statutory right of action for damages for a misrepresentation contained in the Prospectus is limited, in certain provincial and territorial securities legislation, to the price at which the Securities are offered to the public under the prospectus offering. This means that, under the securities legislation of certain provinces and territories of Canada, if the purchaser pays additional amounts upon conversion, exchange or exercise, as applicable, of the Security, those amounts may not be recoverable under the statutory right of action for damages that applies in those provinces and territories of Canada.

The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for the particulars of these rights and should consult with a legal advisor.

CERTIFICATE OF TITAN MINING CORPORATION

Dated: January 27, 2026

This short form prospectus, together with the documents incorporated in this prospectus by reference, will, as of the date of the last supplement to this prospectus relating to the securities offered by this prospectus and the supplement(s), constitute full, true and plain disclosure of all material facts relating to the securities offered by this prospectus and the supplement(s) as required by the securities legislation of each of the provinces and territories of Canada.

"Rita Adiani"

Rita Adiani
President and Chief Executive Officer

"Kevin Hart"

Kevin Hart
Chief Financial Officer

On behalf of the Board of Directors

"Richard Warke"

Richard Warke
Director

"Lenard Boggio"

Lenard Boggio
Director