A PROVEN TEAM DRIVEN BY VALUE AND COMMITTED TO EXCELLENCE

August 2022
This presentation contains "forward-looking information" within the meaning of Canadian securities laws. In some cases, forward-looking information can be identified by the use of forward-looking terminology such as "plans", "targets", "expects", "is expected", "is positioned" or "assumes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would" or "will" occur or be achieved. In addition, any statements that refer to expectations, predictions, indications, projections or other characterizations of future events or circumstances are forward-looking information. Statements containing forward-looking information are not historical facts, but instead represent management's expectations, estimates and projections regarding future events.

Forward-looking information includes, among other things, statements relating to: C1 cash costs and AISC guidance; future financial or operating performance and condition of Titan Mining Corporation (the "Company"), including its ability to continue as a going concern, and its business, operations and properties; the Company’s ability to implement its growth strategy to maximize the value of its property holdings; timing and results of development of the Sphaleros Mine project; the Company’s planned exploration and development activities at Empire State Mine; costs, timing and results of future exploration and drilling; forecasted trends in the global zinc market, including in respect of the price of zinc; capital and operating cost estimates; economic analyses (including cash flow projections) derived from the Company’s most recent technical report; the adequacy of the Company’s financial resources; the estimation of mineral resources; the probability of inferred mineral resources being converted into measured or indicated mineral resources; the production schedule for the Empire State Mines ("ESM") #4 mine; production estimates for ESM #4 mine; any updates to the mine plan for ESM #4 mine and continuation of the drill program at the Empire State Mine; the Company’s expectations with respect to the payment of dividends; and the Company’s ability to make scheduled payments of the principal, or to pay interest on or refinance its indebtedness.

Forward-looking information is based on opinions, assumptions and estimates made by the Company in light of its experience and perception of historical trends, current conditions and expected future developments, as well as other factors that the Company believes are appropriate and reasonable in the circumstances, as of the date of this presentation, including, without limitation, assumptions about: equity and debt capital markets; the ability to raise any necessary additional capital on reasonable terms; the timing and results of exploration and drilling programs; the likelihood of discovering new mineral resources in the Balmat-Edwards district; the accuracy in the Company’s most recent technical report of the mine production schedule; the estimated time of completion of drift rehabilitation and refurbishment of ESM #4 mine; the production estimates; the geology and geophysical data of ESM; metallurgical forecasts; the economic analysis, capital and operating cost estimates; the accuracy of any mineral resource estimates; the successful integration of ESM into the Company’s business; availability of labour; the accuracy of drill sample results at ESM; future currency exchange rates and interest rates; operating conditions being favourable; political and regulatory stability; the receipt of governmental and third party approvals, licenses and permits on favourable terms; obtaining required renewals for existing approvals, licenses and permits and obtaining all other required approvals, licenses and permits on favourable terms; sustained labour stability; stability in financial and capital goods markets; availability of equipment and the condition of existing equipment being as described in the Company’s most recent technical report; the absence of any long-term liabilities created by the mining activity in the Balmat region beyond those described in the Company’s most recent technical report; the accuracy of the Company’s accounting estimates and judgments; the impact of adoption of new accounting policies; the Company’s ability to satisfy the terms and conditions of its indebtedness; and the timing of a revised mine plan for ESM #4. There can be no assurance that such estimates and assumptions will prove to be correct. In addition, if any of the assumptions or estimates made by management prove to be incorrect, actual results and developments are likely to differ, and may differ materially, from those expressed or implied by the forward-looking information contained in this presentation. Accordingly, readers of this presentation are cautioned not to place undue reliance on such information.

Forward-looking information is necessarily based on a number of the opinions, assumptions and estimates that, while considered reasonable by the Company as of the date such statements are made, are subject to known and unknown risks, uncertainties, assumptions and other factors that may cause the actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information, including but not limited to the following factors described in greater detail under the heading "Risks Factors" in the Company’s most recent Annual Information Form available at www.sedar.com: limited operating history; dependence on ESM; limited supplies, supply chain disruptions, and inflation; requirements for additional capital in the future; financial leverage and restrictive covenants restricting our current and future operations; risks related to ramping up mining activities; inherent risks of mining operations; loss of key personnel and potential difficulties in retaining and attracting talent; inherent risk of supply disruption; product decisions based on mineral resources; uncertainty in relation to inferred mineral resources; fluctuations in demand for, and prices of, zinc; production projections and cost estimates for ESM #4 mine may prove to be inaccurate; profitability of the Company; ability to attract and retain qualified management; title; competition; governmental regulations; market events and general economic conditions; environmental laws and regulations; threat of legal proceedings; rights, concessions and permits; social and environmental activism; land reclamation requirements; Tailings Management Facility and environmental reclamation; insurance; undisclosed liabilities; health and safety; dependence on information systems; future financial performance; labor costs; association risk; inherent risks in the Company’s industry; risks inherent in the mining industry; risks inherent in the Company’s business; financial, political and market instability; political or economic instability or changes in applicable laws and regulations; financial or economic conditions in relevant markets; natural disasters; risks relating to transportation, handling and storage; competition; inherent risks in the mining industry; financial, political or economic instability; and other factors described in greater detail under the heading "Risks Factors" in the Company’s most recent Annual Information Form available at www.sedar.com. Any one or more of the above factors could cause the actual results to differ from the Company’s expectations. In making forward looking statements, the Company does not intend to obtain any additional independent opinions from any third party or make any representation or warranty as to the accuracy of any such forward looking statement. Further, the Company does not intend to undertake any obligation to update or revise any forward looking statements to reflect new events or circumstances after the date of this presentation.

INVESTMENT HIGHLIGHTS

Best-in-Class Leadership

Demonstrated track record in exploration and development - Executive Chair, Richard Warke, and the Augusta Group have generated extraordinary shareholder value.

Award-winning - CEO Donald Taylor is the recipient of PDAC’s 2018 Thayer Lindsley Award for the 2014 discovery of the world-class Taylor lead-zinc-silver deposit in Arizona.

Strong board - Experienced, well-rounded and widely-recognized directors with significant insider ownership of +50%.

Pure Zinc Play

Exposure to Increasing Zinc Prices
Located in prolific mining district, zinc plays an important role in economic growth and the green economy with its myriad uses.

Significant Discovery Potential
Targeting new discoveries in the 15-30Mt range at ESM, grading ~10% zinc.

Fixed Zinc Pricing Arrangement
Set floor at $1.62/lb for 50% of production for the remainder of 2022.

Optimizing Cash Flow

ESM mine plan - Includes higher-grade New Fold zone in ESM #4 mine and #2D zone as well as recent results from Turnpike and Hoist House zones.

Focus on exploration - Infill drilling at #4 mine, drilling of near-mine open-pit mineralization as well as district exploration.

Focus on growth - Development of the Sphaleros Mine project in 2022 will add mill feed from both open pit and underground resources in 2023.
** CURRENT AUGUSTA COMPANY RETURNS **

<table>
<thead>
<tr>
<th>Company</th>
<th>TSX/OTCQB</th>
<th>Market Cap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solaris Resources</td>
<td>SLS/SLSSF</td>
<td>$818.59M</td>
</tr>
<tr>
<td>Titan</td>
<td>TI</td>
<td>$72.27M</td>
</tr>
<tr>
<td>Augusta Gold Corp</td>
<td>G/AUGG</td>
<td>$137.02M</td>
</tr>
</tbody>
</table>

** PAST AUGUSTA COMPANY RETURNS **

<table>
<thead>
<tr>
<th>Company</th>
<th>Return %</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ventana Gold Corp</td>
<td>12,960%</td>
<td>SOLD for $1.6B in 2011</td>
</tr>
<tr>
<td>Augusta Resource Corp</td>
<td>3,300%</td>
<td>SOLD for $667M in 2014</td>
</tr>
<tr>
<td>Arizona Mining</td>
<td>6,100%</td>
<td>SOLD for $2.1B in 2018</td>
</tr>
<tr>
<td>Equinox Gold</td>
<td>1,000%</td>
<td>$1.6B Market Cap Co-Founded in 2017</td>
</tr>
</tbody>
</table>

Note: Market cap data as of September 1, 2022. The results for Ventana Gold Corp., Augusta Resource Corp., Equinox Gold, and Arizona Mining Inc. are independent of the results of Titan Mining Corp. and are no guarantee of the future performance. Undue reliance should not be placed thereon when considering an investment in Titan Mining Corp.
OVERVIEW

- Focus on exploration and development; driven by best-in-class leadership
- Empire State Mine (ESM), NY State
  - 100%-owned zinc producer in historic mining district
  - 2022 production forecast at 52M-56M payable lbs, an up to 18% increase from 2021
  - 2022 AISC¹ forecast of US$1.03/lb-US$1.08/lb
  - Developing fully permitted Sphaleros mine project
- Closed credit facility with National Bank for US$40 million
- Four consecutive special quarterly dividend payments
- Pursuing OTCQB listing for Q3 2022

<table>
<thead>
<tr>
<th>Toronto Stock Exchange Symbol</th>
<th>TI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shares Outstanding (as 09/01/2022)</td>
<td>139 M</td>
</tr>
<tr>
<td>Fully Diluted Shares Outstanding (as 09/01/2022)</td>
<td>166 M</td>
</tr>
<tr>
<td>Market Capitalization (as 09/01/2022)</td>
<td>C$72M</td>
</tr>
</tbody>
</table>

¹ AISC/lb is a non-GAAP ratio and is not a standardized financial measure used under IFRS and might not be comparable to similar financial measures disclosed by other issuers. See the Company’s most recent MD&A, under “Non-GAAP Performance Measures – All-In Sustaining Cost (AISC)”, which disclosure is incorporated by reference herein for further information. The Company’s MD&A is filed on SEDAR at www.sedar.com.
FINANCIAL HIGHLIGHTS

H1 2022 HIGHLIGHTS:

- $11.52 million cash flow from operations including net income of $3.3 million or $0.02 per share
- Revenue of $34 million
- Continued special cash dividend payment of C$0.01 per share for Q1 & Q2 2022 and announced another special dividend for Q3 of C$0.01 per share
- Cash balance of $11.0 million on June 30, 2022

<table>
<thead>
<tr>
<th></th>
<th>Units</th>
<th>Year 2021</th>
<th>YTD 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Price</td>
<td>$/lb</td>
<td>1.34</td>
<td>1.67</td>
</tr>
<tr>
<td>Operating Expenses (Site Cost)</td>
<td>$/lb</td>
<td>0.72</td>
<td>0.80</td>
</tr>
<tr>
<td>C1 Cash Cost¹</td>
<td>$/lb</td>
<td>0.93</td>
<td>1.06</td>
</tr>
<tr>
<td>AISC¹</td>
<td>$/lb</td>
<td>1.00</td>
<td>1.13</td>
</tr>
<tr>
<td>Free Cash Flow² (USD)</td>
<td>'000'</td>
<td>2,671</td>
<td>7,538</td>
</tr>
<tr>
<td>Earnings Per Share</td>
<td>$/sh</td>
<td>0.01</td>
<td>0.02</td>
</tr>
<tr>
<td>Annualized Dividend Yield³</td>
<td>%</td>
<td>4%</td>
<td>8%</td>
</tr>
</tbody>
</table>

¹. C1 Cash Cost/lb and AISC/lb are non-GAAP ratios and are not standardized financial measures used under IFRS and might not be comparable to similar financial measures disclosed by other issuers. See the Company’s most recent MD&A, under “Non-GAAP Performance Measures – C1 cash cost per payable pound sold” and “Non-GAAP Performance Measures – All-In Sustaining Cost (AISC)`, which disclosure is incorporated by reference herein for further information on these non-GAAP measures. The Company’s MD&A is filed on SEDAR at www.sedar.com.

². Free Cash Flow is a non-GAAP financial measure and is not a standardized financial measure under IFRS and might not be comparable to similar financial measures disclosed by other issuers. See the appendix to this presentation for further information.

³. Annualized dividend yield based on a share price of C$0.50.

MISSION: To deliver extraordinary shareholder value through exploration, development and operational excellence.
Producing zinc concentrate in northern New York

Long-term zinc concentrate offtake agreement with Glencore – transportation within North America

Total historical district production – 46M tons milled at average grade of 9.3% zinc from 7 mines within 30-mile radius of mill

>80,000 acres of mineral rights controlled throughout district

Shipment of zinc concentrate leaving site
2022 PRODUCTION AND COST GUIDANCE

2022 production forecasted at 52-56 million payable pounds at AISC of US$1.03-1.08/lb

Steady and marked improvement in both safety and production

Anticipated 2023 increase in production from development of the Sphaleros Mine project

Up to an 18% Production Increase from 2021

<table>
<thead>
<tr>
<th>ESM Production and Cost Guidance</th>
<th>Units</th>
<th>H1 2022</th>
<th>2022 Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payable Production</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zinc</td>
<td>Milbs</td>
<td>26.6</td>
<td>52-56</td>
</tr>
<tr>
<td>Cost</td>
<td>$/lb</td>
<td>1.06</td>
<td>0.99 - 1.03</td>
</tr>
<tr>
<td>C1 Cash Cost</td>
<td>$/lb</td>
<td>1.13</td>
<td>1.03 - 1.08</td>
</tr>
<tr>
<td>AISC</td>
<td>$/lb</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sustaining(^1)</td>
<td>$ millions</td>
<td>1.9</td>
<td>3</td>
</tr>
<tr>
<td>Expansionary(^1)</td>
<td>$ millions</td>
<td>1.5</td>
<td>2.0 - 3.0</td>
</tr>
<tr>
<td>Exploration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESM</td>
<td>$ millions</td>
<td>1.0</td>
<td>2.5 - 3.0</td>
</tr>
</tbody>
</table>

1. Sustaining Capital and Expansionary Capital are non-GAAP financial measures. Sustaining Capital and Expansionary Capital sum to Additions to Mineral, Properties, Plant and Equipment, which is the most directly comparable financial measure disclosed in Titan’s financial statements. Sustaining Capital and Expansionary Capital are not standardized financial measures under IFRS and might not be comparable to similar financial measures used by other issuers. See the Company’s most recent MD&A, under “Non-GAAP Performance Measures – Sustaining capital expenditures” which disclosure is incorporated by reference herein, for further information on these non-GAAP measures. The Company’s MD&A is filed on SEDAR at www.sedar.com.
IMPROVING PERFORMANCE AND TRAJECTORY

**Zinc Production**

- Q2-19: 20,000 lbs
- Q3-19: 40,000 lbs
- Q4-19: 60,000 lbs
- Q1-20: 80,000 lbs
- Q2-20: 100,000 lbs
- Q3-20: 120,000 lbs
- Q4-20: 140,000 lbs
- Q1-21: 160,000 lbs
- Q2-21: 180,000 lbs
- Q3-21: 200,000 lbs
- Q4-21: 220,000 lbs
- Q1-22: 240,000 lbs
- Q2-22: 260,000 lbs

**All-in Sustaining Cost per Payable Zinc lb**

- Q1-20: 0.20 USD
- Q2-20: 0.40 USD
- Q3-20: 0.60 USD
- Q4-20: 0.80 USD
- Q1-21: 1.00 USD
- Q2-21: 1.20 USD
- Q3-21: 1.40 USD
- Q4-21: 1.60 USD
- Q1-22: 1.80 USD
- Q2-22: 2.00 USD

**Key Metrics**

- Recovered Production
- Payable Production
- Tons Milled
- Site Operating cost
- Offsite cost
- Sustaining Capital
- Average Zinc Price
Production supported by current mineral resources with potential for near-mine resource additions

- Current source is ESM #4 mine – multiple zones in production; Mahler, New Fold, #2D, and Mud Pond
- Surface drilling continues to expand and discover additional mineralization at #4 Mine and Sphaleros Mine Project
- Future discovery potential in the district

Targeting large, high-grade deposits (15 to 30+ Mt at 10% zinc) – new ideas and modern approach to exploration led by award-winning team
POTENTIAL NEAR-TERM INCREMENTAL MILL FEED

SPHALEROS MINE PROJECT

- Fully Permitted
- Shallow zones of near-mine remnant mineralization discovered in Nov 2019
- Potential to add low-cost production
- Achieves Titan’s strategy of providing feed to ESM mill with over 3,000 tpd of excess capacity in an effort to dramatically increase production and lower costs
- On-going definition drilling continues to expand known mineral resource. Ore extraction of pumphouse pit in anticipated 2023

CONTINUING A PROUD LEGACY

SPHALEROS UNDERGROUND EXPLORATION

Exploration of remnant mining of historic Balmat #1 (1900s to 1930s) & Balmat #2 (1920s to 1960s)
UNDERGROUND DRILLING

- Utilizing Company-owned and operated underground drills (<$20/ft)
- Delineation of additional mineralization in Mahler, Mud Pond and New Fold
- Data used to refine current mine plan in preparation for development in 2023 and beyond
#4 mine – mineralized zones generally plunge to northeast; potential to extend zones up and down-plunge
#2D zone – More than 2,000ft of strike length and open down-plunge and laterally; connected by historic infrastructure on 2500 level to the #4 shaft
DISTRICT EXPLORATION – 2022 PLAN

District Exploration

- Focused on areas of untested geologic, geochemical, and geophysical potential.
  - Currently drill testing the Rossie – Beaver Creek – Maple Ridge Trend
- Surface geochemical sampling to further define past occurrences and extend known mineralization.
- Evaluating unique solutions to generate targets under surface cover.

Near Mine Drilling

- Drilling to commence Q3 2022
- Further definition and exploration of near mine targets and historically unmined mineralization

Nickerson Rd – marbles with Zn occurrence
Beaver Creek – Historic Pb production, favorable lithology
North Gouverneur – Historic Pb production, favorable lithology
Morrison Road – Geochemical anomaly, geophysical target, favorable lithology
Maple Ridge – Favorable lithology and structure
# MINERAL RESOURCES

## Underground as of October 1, 2020

<table>
<thead>
<tr>
<th>Category</th>
<th>Tons (000’s US short tons)</th>
<th>Zn (%)</th>
<th>Contained Pounds (M Lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measured</td>
<td>190</td>
<td>13.56</td>
<td>51.6</td>
</tr>
<tr>
<td>Indicated</td>
<td>1,524</td>
<td>11.49</td>
<td>350.3</td>
</tr>
<tr>
<td>Measured + Indicated</td>
<td>1,714</td>
<td>11.72</td>
<td>401.9</td>
</tr>
<tr>
<td>Inferred</td>
<td>6,551</td>
<td>11.11</td>
<td>1,455.6</td>
</tr>
</tbody>
</table>

Notes: 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. Mineral Resources stated as in-situ grade at a Zinc price of $1.07/lb, with an assumed zinc recovery of 96.3%. Resources are reported using a 5.3% Zinc cut-off grade, based on actual break-even mining, processing, and G&A costs from the ESM operation. Numbers in the table have been rounded to reflect the accuracy or the estimate and may not sum due to rounding. Source: SRK 2020.

## Open Pit as of October 1, 2020

<table>
<thead>
<tr>
<th>Category</th>
<th>Tons (000’s US short tons)</th>
<th>Zn (%)</th>
<th>Contained Pounds (M Lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measured</td>
<td>105</td>
<td>3.34</td>
<td>7.0</td>
</tr>
<tr>
<td>Indicated</td>
<td>595</td>
<td>3.09</td>
<td>36.8</td>
</tr>
<tr>
<td>Measured + Indicated</td>
<td>701</td>
<td>3.13</td>
<td>43.8</td>
</tr>
<tr>
<td>Inferred</td>
<td>217</td>
<td>3.37</td>
<td>14.6</td>
</tr>
</tbody>
</table>

Note: 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. Mineral Resources stated as internal to an optimized pit shell, above a cut-off grade of 1.57% Zn. Cut-off is based on break-even economics at a Zinc price of $1.07/lb, with an assumed zinc recovery of 94%, and actual processing, and G&A costs from the ESM operation. No mining costs were considered in the calculation of this cut-off grade, as the pit optimization incorporates the mining costs to develop the shape for reporting. Numbers in the table have been rounded to reflect the accuracy or the estimate and may not sum due to rounding. Source: SRK 2020.
APPENDIX
OUR APPROACH TO SUSTAINABILITY

GUIDING APPROACH

- Our employees are governed by a commitment to integrity, trust, community involvement as well as environment and social stewardship
- Our projects are developed with the goal of delivering long-term mutual economic benefits for employees, communities, local governments and shareholders
- We strive to minimize the environmental, social and safety impacts of our activities through innovation and the use of technology
- A key measure of a successful project is defined by direct engagement and transparent discussions by our company with the surrounding communities which we impact

INTEGRITY AND TRUST

- We listen, communicate and respond to community stakeholders in an open, respectful and timely manner
- We build and reinforce our relationships through transparency
- We back up our commitments with action
- We comply with both the letter and spirit of laws, regulations and permits

COMMUNITY INVOLVEMENT

- We promote local economic development by hiring and buying locally
- We partner and invest in workforce training – so workers have the skills for future advancement and growth
- We use our projects as a catalyst to expand economic development and community investment for the benefit of local residents, community organizations and local governments

ENVIRONMENTAL AND SOCIAL STEWARDSHIP

- We mitigate the impacts of our actions to ensure the safety and environmental, well-being of the areas in which we operate
- We work jointly with communities to create positive, long-term legacies that benefit future generations
- We carefully manage the natural resources of our projects, and minimize our environmental footprint through sound business decisions
HISTORY OF EXPLORATION SUCCESS | Potential for Additional Discoveries

Many discoveries made during a century of mining operations

- Minimal exploration during 2000-2010 period
- District remains highly prospective – refocus on exploration concurrent with production

Long Production History with Numerous Discoveries

Zinc Production (Metric Tonnes)

Edwards Mine
Hyatt Mine
Empire State Mines
Pierrepont Mine

Select Orebody Discoveries

Major Mine Discoveries
THE RIGHT PEOPLE | Best-in-Class Leadership

**Richard Warke | Executive Chairman**
- Consistent record of creating shareholder value at Augusta Group

**Donald Taylor | CEO**
- 25+ years of mineral exploration experience
- Discovered world-class Taylor sulphide deposit – winner of PDAC’s 2018 Thayer Lindsley Award

**Michael McClelland | CFO**
- 15 years’ experience with global mining companies
- Former CFO of Bisha Mining Share Company, a Nevsun Resources subsidiary

**Purni Parikh | Senior VP, Corporate Affairs**
- 25+ years of public company experience in the mining sector; Arizona Mining, Augusta Resources and Ventana Gold

**Tom Ladner | VP, Legal**
- Advised on multiple M&A transactions valued >$1B
- Advised on 25+ public market financings raising >$750M

Proven success in capital markets, as well as responsible exploration, development and operations.
Free Cash Flow is a non-GAAP measure. The Company believes this measure is a useful indicator of its ability to operate without reliance on additional borrowing or usage of existing cash. Free Cash Flow is intended to provide additional information only and does not have any standardized meaning under IFRS and may not be comparable to similar measures of performance presented by other issuers. The following table provides a reconciliation of Free Cash Flow to the most directly comparable IFRS measure:

<table>
<thead>
<tr>
<th></th>
<th>2021</th>
<th>H1 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net cash provided by operating activities</td>
<td>7,257</td>
<td>10,639</td>
</tr>
<tr>
<td>Capital expenditures</td>
<td>4,586</td>
<td>3,101</td>
</tr>
<tr>
<td>Free cash Flow</td>
<td>2,671</td>
<td>7,538</td>
</tr>
</tbody>
</table>