FOCUS ON EXPLORATION AND DEVELOPMENT
IN A PROLIFIC ZINC DISTRICT

TSX: TI
ANNUAL GENERAL MEETING
OF SHAREHOLDERS
JUNE 26, 2019
Forward-Looking Information

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", "unique investment opportunity", "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, indicatives, projections or other characterizations of future events or circumstances contain 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: estimated C1 cash costs and AISC; future financial or operating performance and condition of 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; the Company's planned exploration and development activities; 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) from the Technical Report; the adequacy of the Company's financial resources; the estimation of mineral resources; the realization of mineral resource estimates; 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; the timing of completion and results of drilling and rehabilitation of ESM #4 mine; production estimates for ESM #4 mine; the Company's plans for marketing of zinc concentrate produced at the Empire State Mine and mill; any updates to the mine plan for ESM #4 mine and continuation of the drill program at the Empire State Mine; timing, receipt and maintenance of approvals, consents and permits under applicable legislation; the Company's ability to re-negotiate expired leases and the timing thereof; environmental, permitting, legal, taxation, title, socio-economic, community relations or political issues that may adversely affect the Company's current and anticipated operations; the Company's expectations with respect to the payment of dividends; the Company's ability to make scheduled payments of the principal, or to pay interest on or refinance its indebtedness; the Company's expectations with respect to principal shareholders; and the Company's expectation that it will be able to continue to locate and retain employees and consultants with required skills and knowledge.

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; future prices of zinc and other metals; 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 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; the metallurgical forecast; 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 Technical Report; the absence of the mining activity in the Balmat region beyond those described in the 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. 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 and Uncertainties" in the Company's Management's Discussion and Analysis for the year ended December 31, 2017, available at www.sedar.com: limited operating history; dependence on ESM; refurbishment of the mine and mill; inherent risks of mining; estimates of mineral resources; production 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; future requirements for additional capital; 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 technology systems; zinc hedging activities; conflicts of interest; risks inherent in the Company's indebtedness; risks inherent in acquisitions; integration of the mine assets; labour and employment retention/relations; anti-corruption and bribery regulation, including ESTMA reporting; infrastructure; enforceability of judgments; absence of a market for the common shares; fluctuations in price of the common shares; loss of entire investment; significant ownership by Richard W. Warke; future sales of common shares by Richard W. Warke and other directors and officers of the Company; use of proceeds; payment of dividends; currency exchange rate risks; pro forma financial information; public company status; financial reporting and other public company requirements; dilution; and securities analysts' research or reports could impact the price of the common shares. These factors and assumptions are not intended to represent or be a complete list of the factors and assumptions that could affect the Company. These factors and assumptions, however, should be considered carefully.

Donald Taylor, MSc., PG, Titan's Chief Executive Officer, is a Qualified Person under NI 43-101, and has reviewed and approved the technical contents of this presentation on behalf of Titan.
Overview

- 100%-owned Empire State Mine ("ESM") in New York State
- Part of the Augusta Group – strong track record in exploration and development
- Zinc production in historic mining district
- Focus on exploration and development; driven by best-in-class leadership

<table>
<thead>
<tr>
<th>Toronto Stock Exchange Symbol</th>
<th>TI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shares Outstanding</td>
<td>102.0 million</td>
</tr>
<tr>
<td>Fully Diluted Shares Outstanding</td>
<td>112.7 million</td>
</tr>
<tr>
<td>Market Capitalization (as of 6/21/2019)</td>
<td>C$46 million</td>
</tr>
</tbody>
</table>

Currency is in US dollars and tonnage is in short tons unless otherwise indicated.
# 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 connected directors

## Focus on Optimizing Cash Flow
- **New mine plan expected H2 2019.** To include higher-grade New Fold zone in ESM #4 mine and #2D zone
- **Focus on development and exploration.** Infill drilling in #2D zone and #4 mine as well as district drilling

## World-Class Exploration Potential
- **Highly-prospective district.** 100 years of historical data, many new untested ideas and a modern approach to exploration
- **Potential for significant discoveries.** Target new discoveries in the 15-30Mt range, grading 10% zinc
The Right People

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

Purni Parikh
President
- 25+ years of public company experience in the mining sector
- President of the Augusta Group

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

Jacqueline Allison
VP, Investor Relations and Strategic Analysis
- 20 years of capital markets and corporate experience

Kevin Torpy
VP, Operations
- 20+ years’ experience in mine building and operations
- Strong focus on safety, efficiency, cost control

Scott Burkett
VP, Exploration
- 10+ years’ experience in exploration and ore control
- Instrumental in discovering world-class deposit at Arizona Mining’s Hermosa project

Influential directors
- John Boehner, Len Boggio, James Gowans
- William Mulrow, George Pataki, Robert Wares

Proven success in capital markets, as well as responsible exploration, development and operations
## The Augusta Group – Track Record in Exploration and Development

### Current companies:

<table>
<thead>
<tr>
<th>Company</th>
<th>Project Description</th>
<th>Transaction Details</th>
<th>Share Price Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ventana Gold Corp.</td>
<td>La Bodega gold project (Colombia)</td>
<td><strong>SOLD in 2011 for ~C$1.6B</strong></td>
<td>12,960%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Augusta Resource Corp.</td>
<td>Hermosa-Taylor zinc-lead-silver project (Arizona)</td>
<td><strong>SOLD in 2018 for ~C$2.1B</strong></td>
<td>6,100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tethyan Resources plc</td>
<td>Rosemont copper project (Arizona)</td>
<td><strong>SOLD in 2014 for ~C$666M</strong></td>
<td>3,300%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newcastle Gold Corp.</td>
<td>Castle Mountain gold project (California)</td>
<td><strong>MERGED into EQX in 2017 for ~C$200M</strong></td>
<td>700%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The results for Ventana Gold Corp., Augusta Resource Corp., NewCastle Gold Ltd. and Arizona Mining Inc. are independent of the results of Titan Mining Corp. and Tethyan Resources plc and are no guarantee of the future performance of these companies. Undue reliance should not be placed thereon when considering an investment in Titan Mining Corp. or Tethyan Resources plc.
Consistently Aligned with Shareholders

Share Ownership

- Management/Directors (52%)
- Institutional (20%)
- Retail (28%)

Highlights

2018

January 30: Mill commissioned and first ore hoisted at ESM
February 26: Zinc concentrate offtake agreement concluded with Glencore
April 10: Mineral resource increased at ESM
June 12: Official opening of ESM
June 17: C$2.1B all-cash bid for sister company Arizona Mining
June 26: Award-winning explorers Donald Taylor and Bob Wares elected to board of directors
September 17: Donald Taylor appointed CEO
October 9: John Boehner, James Gowans and William Mulrow appointed to board of directors
November 14: Major expansion of historic mineralized zone close to the shaft at ESM

Year-to-Date 2019

January 16: #2D zone expanded and US$18.7 million credit facility established
April 1: New Fold, #2D and NE Fowler zones expanded at ESM
Empire State Mine: Focused on Exploration in a 100-Year-Old Zinc District

- Producing zinc concentrate
- Local employer, benefiting St. Lawrence County in northern New York
- Long-term zinc concentrate offtake agreement with Glencore – transportation within North America
- Historic production – 44M tons milled at average grade of 9.4% zinc from 7 mines within 30-mile radius of mill
- More than 80,000 acres of mineral rights controlled throughout the district

Shipment of zinc concentrate leaving site
Near-Mine and District Exploration

- Production supported by current mineral resources with potential for near-mine resource additions
  - Current source is ESM #4 mine – multiple zones; Mahler and Mud Pond zones in production, New Fold zone in development
  - New development frontier in #2 mine – #2D zone to be incorporated in new mine plan in H2 2019
  - Future discoveries expected through near-mine exploration
- Targeting large, high-grade deposits (15 to 30+ Mt at 10% zinc) – new ideas and modern approach to exploration led by award-winning\(^1\) team

\(^1\) Donald Taylor is the recipient of PDAC’s 2018 Thayer Lindsley Award
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.

**Guiding Approach**

**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.

**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.

**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.
Restructuring of ESM

Focus on Mine Development and District Exploration

- Performance of ESM #4 mine was challenged by a number of factors which led to a restructuring and workforce reduction in February 2019
- Mining activities are now focused on lower throughput with a core of motivated local employees
- Mining, development and exploration continue at ESM, and the district remains highly prospective
- Working towards a future where the workforce can be expanded and the full benefit of both the deposit and the district can be realized
Local Economic Benefit

More than 80% of employees reside within 25 miles of the mine

ESM remains committed to local hiring, purchasing and contracting

2018 Socio-economic Benefits Summary

Expenditures (USD x $1 million)¹

<table>
<thead>
<tr>
<th>Expenditure</th>
<th>New York</th>
<th>North Country</th>
<th>Local²</th>
<th>County</th>
<th>Gouverneur</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goods &amp; Services</td>
<td>$12.02</td>
<td>$4.33</td>
<td>$2.41</td>
<td>$2.31</td>
<td>$1.93</td>
</tr>
<tr>
<td>Payroll</td>
<td>$7.98</td>
<td>$7.78</td>
<td>$7.03</td>
<td>$5.79</td>
<td>$4.15</td>
</tr>
<tr>
<td>Taxes</td>
<td>$0.55</td>
<td>$0.52</td>
<td>$0.51</td>
<td>$0.52</td>
<td>$0.50</td>
</tr>
<tr>
<td>Total</td>
<td>$20.56</td>
<td>$12.63</td>
<td>$9.96</td>
<td>$8.61</td>
<td>$6.58</td>
</tr>
</tbody>
</table>

¹ Unaudited expenditures Jan 1 - Dec 31, 2018
² Local is defined as communities within a 25 mile radius of Empire State Mine

Source: Titan Mining Corporation
Excellence in Exploration

Plan view of ESM #4 mine and #2D zone

- #4 mine – drilling potential zone extensions and increasing confidence for mine design
- #2D zone – major extension of zone mined in historic #2 mine; 650 feet east of #4 shaft
- #1D – potential extension of historically-mined zone
Mineral Resource Expansion Potential at ESM #4 Mine and #2D Zone

- #4 mine – potential to extend zones up- and down-plunge
- #2D zone – more than 2,000 feet of strike length and open down-plunge and laterally; connected by historic infrastructure on 2500 level to the #4 shaft
#2D Zone – Existing Infrastructure
Connected to #4 Shaft

Locomotive and rail cars on 1,500-ft tramway on 2500 level

Rehab underway at #2D zone
New Ideas for a Prolific Zinc District

**Exploration targets throughout district**

- Targeting large, high-grade deposits in the 15 to 30+ Mt range
- Multiple targets identified along trend northeast of ESM and south of Hyatt
- Target areas exhibit favourable host rocks, prospective structures and surface expressions of zinc mineralization
- Untested geophysical targets generated from 2008 VTEM survey
- Drill site selection from compilation and review of existing data within target areas
FOR MORE INFORMATION
CONTACT:

Jacqueline Allison
Vice President, Investor Relations
and Strategic Analysis
416-366-5678 Ext. 205
ejallison@titanminingcorp.com

www.titanminingcorp.com

TSX: TI