THE NEWEST U.S. ZINC PRODUCER

LEVERING EXCESS CAPACITY TO DRIVE CASH FLOW GROWTH

ANNUAL AND SPECIAL MEETING OF SHAREHOLDERS

JUNE 21, 2018
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, indications, 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 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 Mine ("ESM") #4 mine; the timing of completion and results of drift rehabilitation and refurbishment of ESM #4 mine; production estimates for ESM #4 mine; the Company's plans for marketed product; the benefits to be derived from the planned rehabilitation and mining activities at the ESM #4 mine; and the completion of the drill program at the Empire State Mines; 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 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 the Empire State Mines, the metallurgical forecast, the economic analysis, capital and operating cost estimates; the accuracy of any mineral resource estimates; the successful integration of the Empire State Mines into the Company's business; availability of labour; the accuracy of drill sample results at the Empire State Mines; 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 any long-term liabilities created by 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 any new accounting policies; and the Company's ability to satisfy the terms and conditions of its indebtedness. 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 at 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 experience; dependency on the Empire State Mines; refurbishment of the mine and mill; inherent risks of mining; estimates of mineral resources; production decisions based on mineral resource uncertainties; mining operations or the ability to access the 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 a complete list of the factors and assumptions that could affect the Company. These factors and assumptions, however, should be considered carefully.

Keith Boyle, P.Eng., Titan's Chief Operating Officer, is a Qualified Person under NI 43-101, and has reviewed and approved the technical contents of this presentation on behalf of Titan.
Titan Investment Highlights

<table>
<thead>
<tr>
<th>Toronto Stock Exchange Symbol</th>
<th>TI</th>
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<tbody>
<tr>
<td>Shares Outstanding</td>
<td>102.0 million</td>
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<tr>
<td>Market Capitalization (as of 6/19/2018)</td>
<td>C$141 million</td>
</tr>
<tr>
<td>Cash &amp; Cash Equivalents (as of 3/31/2018)</td>
<td>$12 million</td>
</tr>
<tr>
<td>Long-Term Debt (as of 3/31/2018)</td>
<td>Nil</td>
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</tbody>
</table>

**Experienced Management and Board**
- **Proven track record** – the Augusta Group has generated extraordinary shareholder value through excellence in exploration and development
- **Extensive experience** – COO and VP, Projects and Innovation have over 50 years of combined experience in mine building and operations
- **Well-connected** – Board of Directors includes George Pataki, former three-term governor of New York

**Fully Funded, Quick Ramp Up to Free Cash Flow**
- **Successful restart of mining operations at Empire State Mine #4 mine** – pure zinc producer in New York State, with first ore skipped on schedule in January and first concentrate shipped in March 2018
- **Milestones** – commercial production expected Q3 2018; production milestone of 1,800 tpd expected Q1 2019

**Three-Pronged Strategy for Organic Cash Flow Growth**
- **Fill the shaft (3,000 tpd; target 150M lb Zn/year) in 2020 with near-mine mineral resource additions** – early success in exploration: inferred mineral resource more than doubled in Q1 2018 to 5.4M tons at undiluted grade of 12.50% zinc\(^{(1)}\); new mineralized zones identified near existing infrastructure in Q2 2018
- **Fill the mill (5,000 tpd; target 225M lb Zn/year) in 2022 through district/regional exploration success**
- **Modernize the operation, improving efficiencies and lowering costs**

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\(^{(1)}\) Refer to technical report entitled "NI 43-101 Preliminary Economic Assessment Updated Technical Report, Empire State Mines, Gouverneur, New York, USA", dated May 24, 2018 ("2018 PEA"). The Company’s production decisions are based on the 2018 PEA 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 associated with these decisions. These risks, among others, include areas that would be analyzed in more detail in a feasibility study, such as applying economic analysis to mineral resources and mineral reserves, more detailed metallurgy and a number of specialized studies in areas such as mining and recovery methods, market analysis, and environmental and community impacts. The 2018 PEA is preliminary in nature and uses inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the results of the 2018 PEA will be realized. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that all, or any part, of the estimated mineral resources will be converted into mineral reserves. The 2018 PEA assumes the following zinc prices: 2018: US$1.50/lb; 2019: US$1.45/lb; 2020: US$1.40/lb; 2021: US$1.35/lb; 2022: US$1.20/lb; US$1.05/lb thereafter.

All dollar amounts are in US dollars and tonnage is in short tons unless otherwise indicated.
The Augusta Group Track Record

Extraordinary shareholder value realized through excellence in exploration and development(1)

La Bodega gold project (Colombia)
VENTANA GOLD CORP.
SOLD for ~C$1.6B in 2011
12,960% Share Price Increase

Rosemont copper project (Arizona)
AUGUSTA RESOURCE CORPORATION
SOLD for ~C$666M in 2014
3,300% Share Price Increase

Hermosa-Taylor zinc-lead-silver project (Arizona)
ARIZONA MINING
Received All Cash Offer of C$2.1B in 2018
6,100% Share Price Increase

Castle Mountain gold project (California)
NEWCASTLE GOLD
MERGED into EQX for ~C$200M in 2017
700% Share Price Increase

(1) The results for Ventana Gold Corp., Augusta Resource Corp., Arizona Mining Inc. and NewCastle Gold Ltd. are independent of the results of the Company and are no guarantee of the future performance of the Company. Undue reliance should not be placed thereon when considering an investment in Titan Mining.
Empire State Mines: Reviving a 100-Year-Old Zinc District

Established mining district in northern New York State

- Empire State Mine #4 mine (restarted) and six historic mines
- Historic production – 44M tons milled at average grade of 9.4% zinc
- >80,000 acres of mineral rights controlled by Titan
- Excellent infrastructure
- Experienced local workforce
Underutilized Mine and Mill Complex

Mill recommissioned and first ore hoisted on schedule and budget

- Mill – 5,000 tpd capacity
- #4 shaft adjacent to mill – 3,800 tpd capacity (1)

Underground development commenced

- Fully-developed access to multiple levels
- Second egress provided by #2 shaft and hoist

(1) Assumes a hoisting rate of 200 tons per hour and an average availability of 19 hours per day.
Localization: Local Employment

- Commitment to investing in the local workforce
- Since the start of the project, the workforce has grown from 24 to more than 200 people (74% are local)
- ESM is working with the NYS Department of Labor, NYS Power Authority, Workforce Development Institute, and Fort Drum military base in order to recruit and train the local workforce
Training and Localization: Underground Basic Training Program

- 13 week training program
- First of 10 sessions started April 23
- Transition from mining contractor over the next 12 months
- Trainees are paid as full-time employees, benefits are also provided

First Class of Local Trainees
Local Economic Impact

- Providing business for local restaurants, bars, motels, B&B
- Purchasing prescription safety glasses from the local optician
- Supporting other local vendors for the services, supplies and materials needed on site
- Utilizing Gouverneur Hospital for pre-employment physical, drug screening, hearing tests and other medical services as needed

Increase in Sales (Taxes Collected)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total (Fowler &amp; Gouverneur)</th>
</tr>
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<tbody>
<tr>
<td>2017</td>
<td>$235,000</td>
</tr>
<tr>
<td>2018</td>
<td>$240,000</td>
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</tbody>
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9% increase
Three-Pronged Growth Strategy

Cash flow growth from leveraging excess shaft and mill capacity

- Fill the shaft (3,000 tpd) and extend mine life with near-mine mineral resource additions
- Fill the mill (5,000 tpd) with economic deposits identified through district and regional exploration
- Modernize the operation, improving efficiencies and lowering costs

Growth Strategy – Levering Excess Capacity Through Exploration Success

<table>
<thead>
<tr>
<th>Year</th>
<th>Throughput Tons per Day (tpd)</th>
</tr>
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<tbody>
<tr>
<td>2022</td>
<td>100 Mlb Zn/year</td>
</tr>
<tr>
<td>2023</td>
<td>150 Mlb Zn/year</td>
</tr>
<tr>
<td>2024</td>
<td>225 Mlb Zn/year</td>
</tr>
<tr>
<td>2025</td>
<td>300 Mlb Zn/year</td>
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<tr>
<td>2026</td>
<td>375 Mlb Zn/year</td>
</tr>
<tr>
<td>2027</td>
<td>450 Mlb Zn/year</td>
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<tr>
<td>2028</td>
<td>525 Mlb Zn/year</td>
</tr>
<tr>
<td>2029</td>
<td>600 Mlb Zn/year</td>
</tr>
<tr>
<td>2030</td>
<td>675 Mlb Zn/year</td>
</tr>
<tr>
<td>2031</td>
<td>750 Mlb Zn/year</td>
</tr>
<tr>
<td>2032+</td>
<td>825 Mlb Zn/year</td>
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</tbody>
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- **Regional Targets**
- **District Targets**
  - Hyatt, West Branch, Sully
  - Edwards
  - VTEM
- **Near-Mine Potential**
  - Extensions of zones
  - #2 Deep, #1 Deep
  - NE Streeter
  - Remnants
  - West Gleason
- **Preliminary Economic Assessment**
  - Existing resource
  - Remnants
Filling the Shaft (3,000 tpd) – New Near-Mine Mineralized Zones

- #2 Deep - potential extension of zone mined in historic #2 mine; 1,300 feet east of #4 shaft; unmined historic mineralized material 931,000 tons at diluted grade of 6.59% zinc

- NE Streeter – 2,000 feet from Sylvia Lake deposit; unmined historic mineralized material 300,000 tons at diluted grade of 6.28% zinc

- #1 Deep – potential extension of a zone mined in historic #1 mine; unmined historic mineralized material 410,000 tons at diluted grade of 6.95% zinc

- All three zones are near existing infrastructure and are open down-plunge
Exploration – 2018 budget US$5M

- Sully/West Branch – follow up on high-grade intercepts: 19.5 feet at 16.7% Zn, 10.3 feet at 22.6% Zn, 5.8 feet at 34.1% Zn; test for lateral and vertical extensions

- Gap Zone – potential down-plunge extension of known mineralized zones
Filling the Mill (5,000 tpd) cont’d

New district opportunities

- Untested geophysical targets generated from 2008 VTEM
- North Gouverneur and Moss Ridge SW
- Gravity survey
Improving productivity through innovation

- Operate through shift change with the use of tele-remote equipment
- Use location data and short interval control to manage the movement of machines and people
- Target 20-40% increase in productivity
- Implementation has started; innovation to be applied across the business

Growth Strategy – Levering Excess Capacity Through Modernization
Modernization – Driving Growth, Improved Efficiencies and Lower Costs

Modernization has started – advancing towards 1,800 tpd milestone

Opportunities exist to reduce capital costs

New technology is off-the-shelf – proven and available
## A Catalyst-Rich Path to Phase 1 Production Milestone

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Details</th>
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| **Re-commissioning (Q4 2017)** | • Refurbishment of existing infrastructure and equipment  
• Reconditioning and re-starting the mobile equipment fleet  
• General rehabilitation of the underground workings |
| **First ore skipped (January 2018)** | • Development of new ramps, drifts and stopes concurrently with capitalized pre-commercial production |
| **Concentrate offtake agreement** | • Long-term contract with Glencore  
• Concentrate to be transported within North America – simple, low-risk logistics |
| **Mineral resource update (Q1 2018)** | • Mineral resource expansion completed Q1 and announced early April  
• Updated PEA filed in May – main update is inclusion of economic impact of U.S. tax reform\(^{(1)}\) |
| **Start of 2018 exploration program (Q1 2018)** | • US$5M budget for regional exploration, including 40,000 feet of diamond core drilling  
• Success-based budget – potential to add drills |
| **Commercial production (Q3 2018)** | • Ramp up to commercial production |
| **Exploration results (Q4 2018)** | • Ongoing drill program and review of historical data |
| **Updated LOM plan (Q1 2019)** | • Economic analysis to include additional mineral resources |
| **Phase 1 production milestone (Q1 2019)** | • Mill throughput of 1,800 tpd  
• Three ore zones – Mud Pond, Mahler and New Fold |

TSX: TI

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