

CAUTIONARY NOTES

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", "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: 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 Turnpike 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 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; 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; 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 Balmatets; 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 on favourable terms; sustained labour stability; stability in financial and permits on favourable terms; sustained labour stability; stability in financial apod 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 adopti

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; 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; 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; undiscions; integration of the mine assets; labour and employment retention/relations; anti-corruption and bribery regulation, including ESTMA reporting; infrastructure; enforceability of judgments; global outbreaks and coronavirus; 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; fluture sales

Scientific and Technical Information:

The scientific and technical information in this presentation is derived from the Technical Report titled, "Empire State Mines 2021 NI 43-101 Technical Report (Amended)" with an effective date of February 24, 2021, prepared by David Warren, Gary Methven, Deepak Malhotra, David Vatterrodt, Ben Peacock, and Matthew Hastings who are Qualified Persons as defined in National Instrument 43-101 Standards of Disclosure for Mineral Projects.

EXCELLENT TRACK RECORD

CURRENT AUGUSTA COMPANY RETURNS

PAST AUGUSTA COMPANY RETURNS



TSX: SLS **OTCQB: SLSSF**

\$790M **Market Cap**





TSX: TI

\$65M





TSX: G **OTCQB: AUGG**

\$150M **Market Cap**





12,960% return

VENTANA GOLD CORP.

SOLD for \$1.6B in 2011



SOLD for \$667M in 2014



6,100% return

SOLD for \$2.1B in 2018

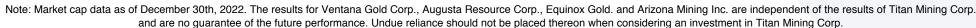


EQUINOX

1,000% return

\$1.6B Market Cap Co-Founded in 2017







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 on 80,000 acres of minerals rights in the 15-30Mt range at ESM, grading ~10% zinc

Continual Production Growth

Forecast 54-58 M lbs of payable zinc for 2023

Optimizing Cash Flow

Fixed Zinc Pricing Arrangement

Arranged for approximately 30% of forecasted production at ESM at \$1.55/lb for the remainder of 2023

Focus on growth - Development of the Turnpike Mine project (formerly referred to as Sphaleros) will increase mill throughput in 2024

Focus on exploration - Infill drilling at #4 mine and Turnpike project as well as district exploration

Attractive Valuation and Upside Potential

Prudent Capital Allocation

Excess cash flow focused on preserving balance sheet strength.

Dividend Temporarily Suspended

To be re-evaluated by Board of Directors as zinc prices improve.

Compelling valuation

Trading at a discount to most small/intermediate base metals producers at only 3.5 P / CF (LTM).

Significant upside potential

Torque to zinc prices and exploration and development plans offer significant additional upside over time



STRONG BOARD | 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

▲ Winner of 2018 Thayer Lindsley Award for Taylor discovery



Speaker John Boehner

▲ Served as the 53rd Speaker of the US House of Representatives



Governor George Pataki

▲ Served three terms as the 53rd Governor of the State of NY; Co-Founder and Chairman of the Pataki-Cahill Group



William Mulrow

▲ Senior Advisor at the Blackstone Group, an alternative asset manager



Len Boggio

▲ Corporate Director and former partner of PwC





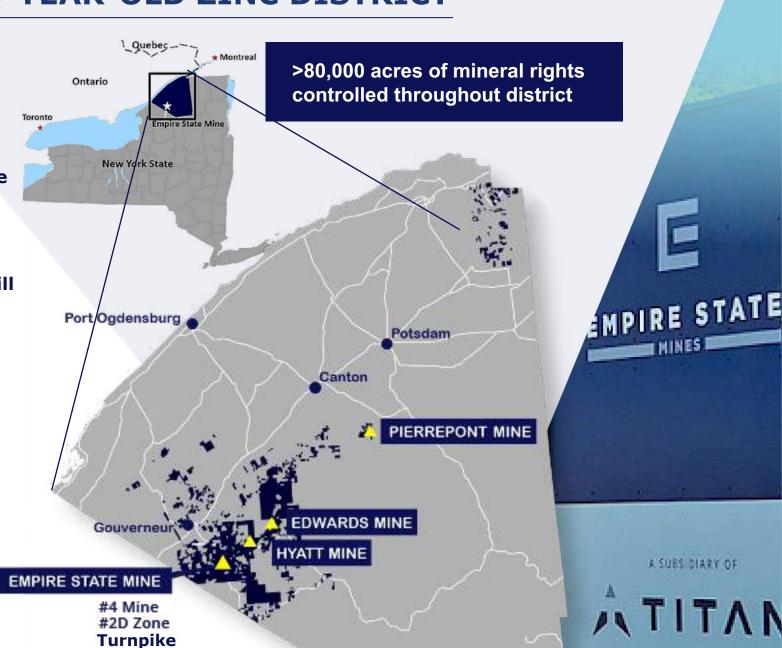
FOCUSED ON EXPLORATION IN A 100-YEAR-OLD ZINC DISTRICT

OVERVIEW

- > Producing zinc concentrate in northern NY State
- Empire State Mines (ESM) controls >80,000 acres of minerals rights
- Long-term zinc concentrate offtake agreement with Glencore (transportation within North America)
- Developing fully permitted Turnpike mine project
- > Total historical district production 46M tons milled at ave. grade of 9.3% zinc from 7 mines within 30-mile radius of mill
- > Excellent metallurgy:
 - recoveries 95-97%;
 - zinc concentrate grade of 58 61%



Shipment of zinc concentrate leaving site



CAPITAL STRUCTURE

Toronto Stock Exchange Symbol	TI
Cash Position (as at 6/30/2023)	\$2.9 M
Shares Outstanding (as at 6/30/2023)	136 M
Fully Diluted Shares Outstanding (1) (as at 6/30/2023)	166 M
Market Capitalization (as 6/30/2023)	C\$55M

^{1. 8} M Warrants exercisable at \$0.75 until Sep 22, 2023; 3 M Warrants exercisable at \$0.50 until Jun 14, 2024; 8.6 M Warrants exercisable at \$0.50 until Oct 10, 2024

DIVIDEND POLICY

> In June 2023, Titan elected to temporarily suspend the payment of its \$0.01/share quarterly dividend in order to preserve capital and remain compliant with loan covenants, given a downturn in zinc prices.

> The Board of Directors intends to re-evaluate the dividend as zinc prices improve.



2023 YEAR TO DATE - HIGHLIGHTS

- > Improved safety with total recordable injury rate below the national average
- > H1 2023 zinc production of 28.8M payable lbs (2022 record zinc production of 52.5M payable lbs)
- \$26 million in revenue in the first half year of 2023
- Cash position of \$2.9 million at June 30, 2023
- Forecasted 54-58 M lbs of payable zinc for 2023
- Cash dividend of C\$0.01 per share for six consecutive quarters including for Q1 2023

MISSION:

To deliver extraordinary shareholder value through exploration, development and operational excellence

	Units	H1 2023	Year 2022
Zinc Price	\$/lb	1.28	1.55
Operating Expenses (Site Cost)	\$/Ib	0.85	0.83
C1 Cash Cost ¹	\$/lb	1.14	1.11
AISC1	\$/Ib	1.19	1.16
Earnings (loss) Per Share	\$/sh	(0.03)	(0.01)

^{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.



Annualized Dividend Yield³

^{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.

^{3.} Annualized dividend yield based on a share price of C\$0.41 as at June 30, 2023.

2023 PRODUCTION AND COST GUIDANCE

- > Anticipate increase in production in 2023 from development of the Turnpike Mine project
- > Steady and marked improvement in safety and production

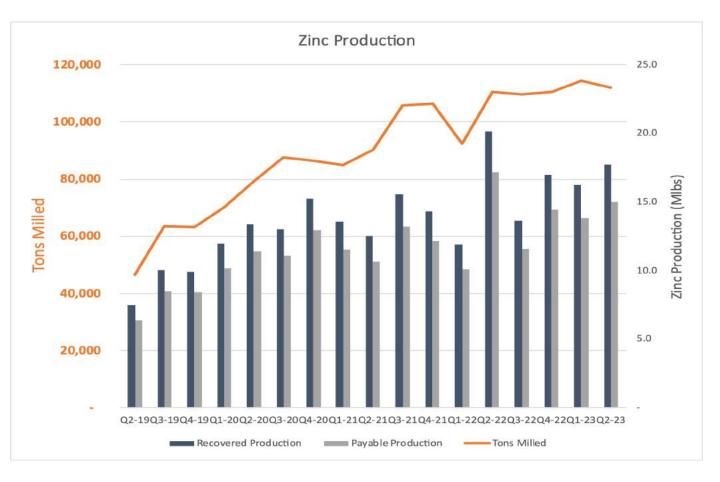
ESM Production and Cost Guidance				
	Units 2023			
Payable Production				
Zinc	Mlbs	54-58		
Cost				
C1 Cash Cost ¹	\$/lb	1.08 – 1.12		
AISC ¹	\$/lb	1.14 - 1.18		
Capital				
Sustaining	\$ millions	4 – 4.5		
Expansionary	\$ millions	4 - 5		
Exploration				
ESM	\$ millions	3 - 4		

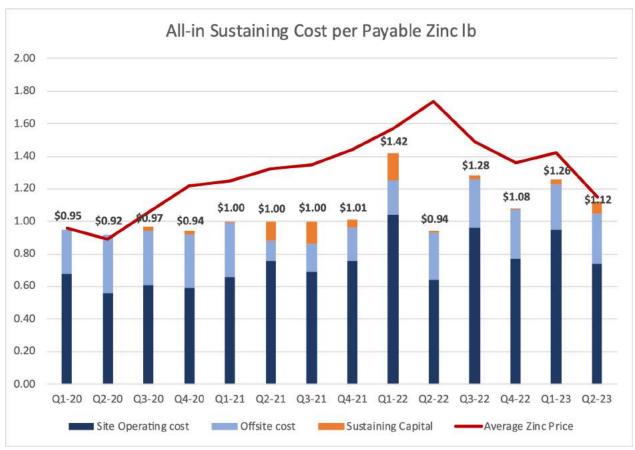
^{1.} C1 Cash Cost and AISC are non-GAAP measures. Accordingly, these financial measures are not standardized financial measures under IFRS and might not be comparable to similar financial measures disclosed by other issuers. For additional information, see the section titled "Non-GAAP performance measures" of Titan's MD&A dated November 10, 2022, available on SEDAR at www.sedar.com, which section is incorporated by reference herein.



^{2.} These production numbers are preliminary in nature and subject to change when the Company releases its Q4 2022 and audited full-year 2022 financial and operating results in March 2023.

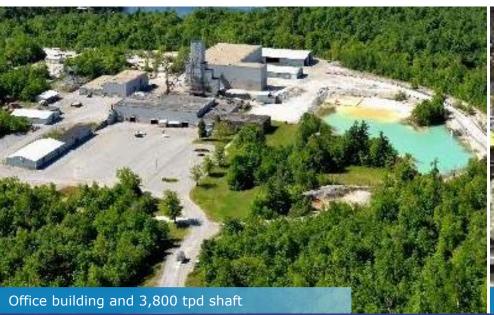
IMPROVING PERFORMANCE AND TRAJECTORY





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 in production; Mahler, New Fold, #2D, and Mud Pond
 - Drilling continues to expand and discover additional mineralization at #4 Mine and Turnpike 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







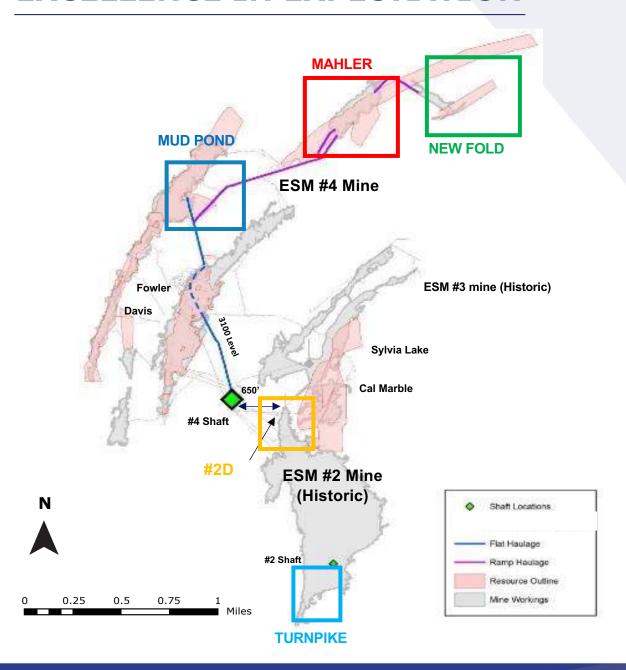
POTENTIAL NEAR-TERM INCREMENTAL MILL FEED

TURNPIKE 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 increase production and lower costs
- On-going definition drilling continues to expand known mineral resource.



EXCELLENCE IN EXPLORATION



UNDERGROUND DRILLING

Utilizing Company-owned and operated underground drills (drilling cost <\$20/ft)</p>

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

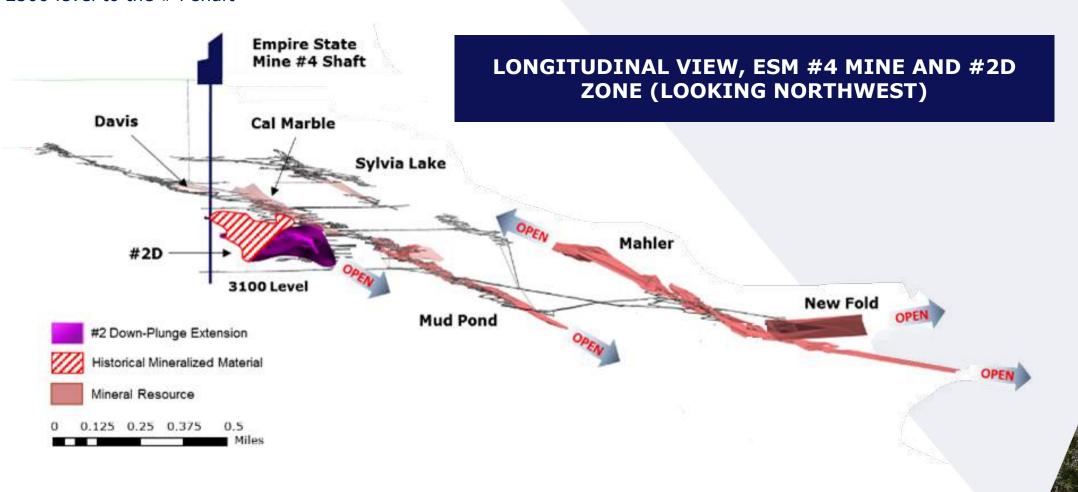
SURFACE DRILLING

Delineation of additional mineralization near surface at Turnpike (targeting mineralization above the historic 500 level)

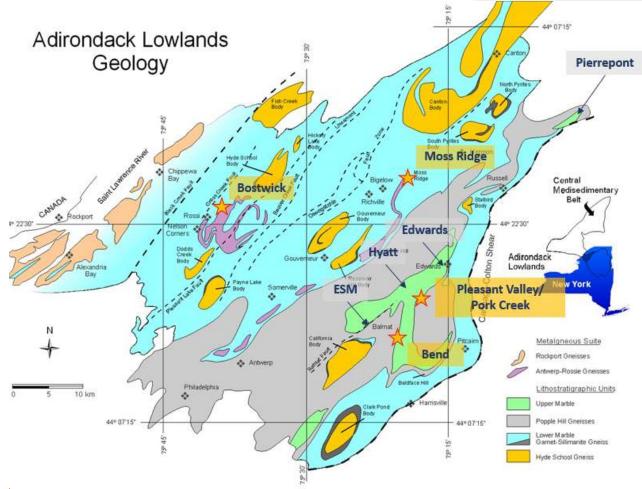
Confirming historically modeled mineralization, and developing best path forward for mining at Turnpike.

RESOURCE EXPANSION POTENTIAL AT #4 AND #2D

- > #4 mine mineralized zones generally plunge to northeast; potential to extend zones up and down-plunge
 - > Underground exploration drilling following up on intercepted mineralization between Mahler and New Fold.
- > #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 - 2023 & 2024 PLAN



Pleasant Valley/Pork Creek - Known occurrence open along strike

Bend- Known occurrence untested along strike

Bostwick – Known occurrence with testable geophysical anomaly

Moss Ridge- Favorable lithology and structure

District Exploration

- Primary Focus on testing mineralization within the historic Balmat – Pierrepont trend.
 - Additional review of areas of untested geologic, geochemical, and geophysical potential within the district.
- Surface geochemical sampling to further define past occurrences and extend known mineralization.

> 1,981 soil samples taken in Q4 2022.

▶ Planning of additional ~2,000 samples for 2023-2024.

Evaluating and implementing unique solutions to generate targets under surface cover.

Near Mine Drilling

- Phase II at Turnpike completed in May 2023
- Further definition and exploration of near mine targets and historically unmined mineralization



MINERAL RESOURCES

Underground as of October 1, 2020

Category	Tons (000's US short tons)	Zn (%)	Contained Pounds (M Lbs)
Measured	190	13.56	51.6
Indicated	1,524	11.49	350.3
Measured + Indicated	1,714	11.72	401.9
Inferred	6,551	11.11	1,455.6

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

Category	Tons (000's US short tons)	Zn (%)	Contained Pounds (M Lbs)
Measured	105	3.34	7.0
Indicated	595	3.09	36.8
Measured + Indicated	701	3.13	43.8
Inferred	217	3.37	14.6

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.

Consistent Resource Expansion

Success in replacing mined ore - Titan has been successful historically in replacing mined ore each year at similar grades through drilling activity

Continued Growth by the drill bit - Titan is confident in its ability to grow its mineral reserves and resources over time through infill drilling at the #4 mine and Turnpike project as well as district exploration

Long Life - Management views ESM as a longlife operation, with over 15-20 years of production anticipated





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

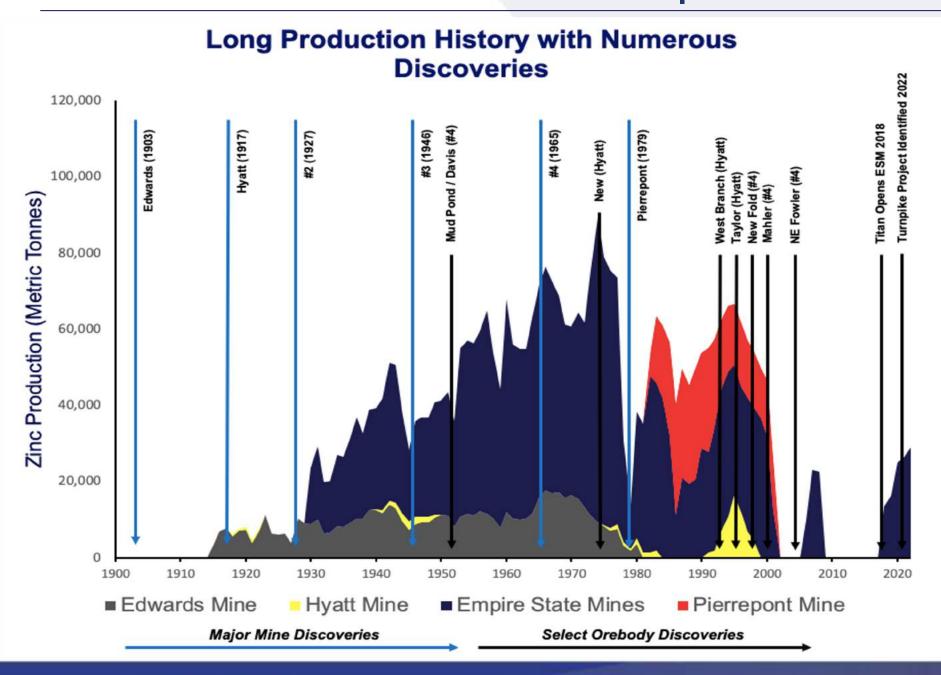
Committed
to localization
and building
partnerships that
deliver long-term
mutual benefits

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

THE RIGHT PEOPLE | Best-in-Class Management



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 >C\$1B
- ▲ Advised on 25+ public market financings raising >C\$750M





NON-GAAP FINANCIAL MEASURES | FREE CASH FLOW

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.

	2023YTD	2022
Net cash provided (used) by Operating Activities	(5,433)	15,667
Capital Expenditures	1,663	4,309
Free Cash Flow	(7,096)	11,358



