

# TITAN MINING CORPORATION MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2023

## Management's Discussion and Analysis

This Management's Discussion and Analysis ("MD&A") is intended to help the reader understand Titan Mining Corporation ("Titan", "we", "our" or the "Company"), our operations, financial performance, and current and future business environment. This MD&A is intended to supplement and complement our audited consolidated financial statements for the year ended December 31, 2022, prepared in accordance with International Financial Reporting Standards ("IFRS") and our unaudited consolidated financial statements for the three and nine months ended September 30, 2023.

Additional information regarding Titan, including the risks related to our business and those that are reasonably likely to affect our financial statements in the future, is contained in our continuous disclosure materials, including our most recent Annual Information Form ("AIF"), consolidated financial statements and Management Information Circular, which are available on the Company's website at <a href="https://www.titanminingcorp.com">www.titanminingcorp.com</a> and under the Company's profile on the SEDAR website at <a href="https://www.sedar.com">www.sedar.com</a>.

This MD&A is dated November 10, 2023. All dollar amounts reported herein are in US dollars unless otherwise indicated.

**Management's Discussion and Analysis** (In thousands of US Dollars, unless otherwise indicated)

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## **Management's Discussion and Analysis**

(In thousands of US Dollars, unless otherwise indicated)

#### **OUR BUSINESS**

Titan is a natural resource company engaged in the acquisition, exploration, development and production of mineral properties. Our corporate office is in Vancouver, British Columbia, and our shares are listed on the Toronto Stock Exchange under the symbol "TI".

The Company's principal asset is a group of 100%-owned, high-grade zinc mines located in the Balmat-Edwards mining district in northern New York State, near Gouverneur and 35 miles south of the Port of Ogdensburg and include the Empire State Mine's #2, #3, #4, Hyatt, Pierrepont and Edwards mines (collectively the "Empire State Mine" or "ESM") Titan declared commercial production at ESM on January 1, 2020. The Company also continues to maintain its unpatented mining claims in New Mexico, USA.

#### STRATEGY AND OUTLOOK

Titan's mission is to deliver extraordinary shareholder value through exploration, development and operational excellence.

Titan believes that the district surrounding ESM remains underexplored despite the long operating history of the district. The Company is focused on discovering and developing additional high-grade, low-cost mineral resources to feed the mill at ESM. ESM's #4 mine is connected to its #2 mine, and there is potential for significant mineral resource expansion which is expected to support production growth. Other historic mines and new targets within the district will be a focus for Titan's exploration team.

Mining and milling activities at ESM continued to increase during the past year with a record 52.5 million payable pounds of zinc produced. With year-to-date production of 47.1 million payable pounds of zinc, ESM is on track to improve on the record production level from the prior year. ESM continues to review ways to increase operating efficiencies, particularly by adding incremental ore feed from other historically mined zones outside of the current #4 mine.

In addition, the Company continues to examine various financing options to bolster the Company's treasury.

#### FINANCIAL AND OPERATIONAL SUMMARY

	T	hree m	ontl	ns ende	d Se	ptember 3	0,	Nine months ended September 30,				
Financial												
Performance		2023		2022		Change		2023		2022		Change
Net income (loss)	\$											
before tax	*	501	\$	(161)	\$	662	\$	(3,237)	\$	3,145	\$	(6,382)
Operating cash inflow												
before changes in non-	\$											
cash working capital		4,207	\$	1,221	\$	2,986	\$	7,448	\$	12,740	\$	(5,292)
Financial Condition				Sept	teml	per 30, 202	23			Dece	mbe	er 31, 2022
Cash and cash												
equivalents				\$		4,3	19			\$		6,720
Working capital				\$	15,426					\$		7,289
Total assets				\$	59,060				\$			65,999
Equity				\$		3,53	32		\$			10,513

## **Management's Discussion and Analysis**

(In thousands of US Dollars, unless otherwise indicated)

	Three months ended September 30,						Nine months ended September 30,					
Operating Data		2023		2022		Change		2023		2022		Change
Payable zinc produced (mlbs)		18.3		11.6		6.7		47.1		38.1		9.0
Payable zinc sold (mlbs) Average provisional zinc price		18.3		12.6		5.7		48.2		38.0		10.2
(per lb)	\$	1.10	\$	1.49	\$	(0.39)	\$	1.21	\$	1.61	\$	(0.40)

#### **HIGHLIGHTS**

Significant events and operating highlights for the third quarter ended September 30, 2023 and up to the date of this MD&A include the following:

- There were no Lost Time Injuries during the third quarter.
- Produced a record 18.3 million payable pounds of zinc in the quarter.
- Tons milled were consistent with milling rates in the prior quarter and payable pounds of zinc produced were 22% higher than the prior quarter due to higher zinc grades than planned from Lower Mahler and a successful pillar recovery campaign in Mud Pond during the quarter.
- Announced the discovery of the Kilbourne graphite trend, an extensively drill tested graphite-bearing trend located on permitted lands. Highlights include:
  - At or near surface targets with geological potential totaling between 210 and 1,050 million tons (Mt) grading between 2.0% and 4.5% graphitic carbon (Cg)
  - Flake graphite is a key input to the auto industry battery supply chain and designated as a Critical Material by the United States Department of Energy
  - There is no domestic source of flake graphite production; China, which accounts for more than half of global production, has recently announced export restrictions that may threaten the market
  - ESM lands hosting the Kilbourne graphite trend are fully permitted for drilling with some portions of these lands also currently permitted for mining
  - Aggressive plan to fast-track exploration and development with goal of being first domestic supplier of materials to the auto industry battery market

			2023		2022					
		Q3	Q2	Q1	<b>FY</b> (1)	Q4	Q3	Q2	Q1	
Production										
Ore mined	tons	108,210	112,528	114,888	419,104	111,213	107,437	111,758	88,696	
Ore milled	tons	110,202	112,082	114,261	425,022	112,751	109,587	110,416	92,268	
Feed grade	zn%	10.1	8.1	7.4	7.5	7.9	6.5	9.1	6.7	
Recovery	%	96.3	96.3	96.1	96.4	96.2	96.3	96.5	96.3	
Payable zinc	mlbs	18.3	15.0	13.8	52.5	14.4	11.6	16.5	10.1	
Concentrate grade	zn%	60.3	59.8	59	58.8	58.2	58	60.4	58.2	
Zinc concentrate										
produced	tons	17,855	14,727	13,785	52,547	14,573	11,744	16,040	10,191	

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(In thousands of US Dollars, unless otherwise indicated)

Sales									
Payable zinc	mlbs	18.3	15.0	14.8	51.1	13.0	12.6	15.0	10.4
Average provisional									
zinc price	\$/lb	\$ 1.10	\$ 1.15	\$ 1.42	\$ 1.55	\$ 1.36	\$ 1.49	\$ 1.74	\$ 1.57
C1 cash cost per	,								
payable zinc pound									
sold <sup>(2)</sup>	\$/lb	\$ 0.84	\$ 1.05	\$ 1.23	\$ 1.11	\$ 1.06	\$ 1.26	\$ 0.93	\$ 1.25
Sustaining capital	.,				•				
expenditures	\$/lb	\$ 0.02	\$ 0.07	\$ 0.03	\$ 0.05	\$ 0.02	\$ 0.02	\$0.01	\$ 0.17
AISC <sup>(2)</sup>	\$/lb	\$ .86	\$ 1.12	\$ 1.26	\$ 1.16	\$ 1.08	\$ 1.28	\$ 0.94	\$ 1.42
HISC	Ψ/10	Ψ .00	Ψ 1.12	Ψ 1.20	Ψ 1.10	ψ 1.00	Ψ 1.20	ψ U. ) <del>T</del>	Ψ 1.72

<sup>(1)</sup> The full-year figure may not equal the sum of the quarters due to rounding.

#### **OPERATIONS REVIEW**

Mining efforts in the third quarter of 2023 focused on the Mahler, New Fold, and Mud Pond zones. Mining activities remained suspended in the N2D zone in response to lower than expected zinc prices. Waste development that was advanced in the second quarter on the Mahler ramp system provided access to a high-grade ore horizon in the Lower Mahler mining zone that supported strong grades resulting in better than expected metal production throughout the quarter. It is expected that ore from this zone will continue to support head grade at planned levels for the remainder of the year. In addition, the pillar recovery program in Mud Pond delivered tons and grade, as planned, further supporting the strong production for the quarter. Mining is expected to continue in the same zones in the fourth quarter.

#### **EXPLORATION UPDATE**

## **Empire State Mine**

Historic Data

The review, compilation, digitization, and modelling of historic data collected over approximately 100 years by the previous operators of ESM continues to contribute to the exploration success at ESM, with several nearmine mineralized zones identified, including the N2D zone and Turnpike.

Titan's exploration team has continued to generate additional near-mine and district targets using historic soil, stream sediment, drilling, and geophysical data. These historic data sets are also being utilized to identify additional near-surface mineralization in the vicinity of the other historic mining areas (Hyatt, Pierrepont, Edwards, and Rossie-Macomb), which are being prioritized for drill testing in 2024. The team continues to research and consolidate mineral rights interests in high priority target areas. Surface sampling and mapping is scheduled to continue in these priority areas in 2023.

In addition to zinc and base metal occurrences the company has identified multiple areas with historic documentation of graphite bearing lithologies in St. Lawrence County. This review has helped identify graphite targets within ESMs mineral rights, including the Kilbourne occurrence within the stratigraphic sequence which hosts the ESM ore bodies.

<sup>(2)</sup> C1 cash cost, Sustaining Capital Expenditures, and All-In Sustaining Cost ("AISC") are non-GAAP measures. These terms are not standardized financial measures under IFRS and might not be comparable to similar financial measures disclosed by other issuers. See *Non-GAAP Performance Measures* below for additional information.

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2023 Drill Programs

## Underground:

Drill programs in the third quarter of 2023 focused on exploring near mine targets within proximity to active mine areas. All underground drilling was completed with Company-owned underground drills by Company employees. A total of 6 holes totaling 7,769 ft were completed targeting mineralized extensions Lower Mahler. Drilling is planned to continue to target Mahler and commence at Fowler in the fourth quarter of 2023.

#### Surface:

There was no surface drilling in the third quarter of 2023. Planning is underway for 2024 surface drilling.

#### Surface Exploration

Follow up sampling and prospecting of soil anomalies from the 2022 surface program took place in July. A total of 13 samples were collected, with a high value of 4.5% Zn returned from Moss Ridge. Follow up sampling is planned while weather permits.

#### Kilbourne

#### Kilbourne

Titan Mining has begun work on further defining the Kilbourne prospect, a graphite exploration target hosted within the same stratigraphic sequence as ESMs zinc mineralization. The host unit is Unit 2 of the lower marbles. Historic mapping and drilling have documented 8.2 km of strike length, to a depth of roughly 1 km from surface. Over 3.5 km of this strike length is within the affected area of the Empire State Mine and is covered by current permitting. The remaining strike length is securely within mineral rights held by ESM.

The unit has been intercepted in 53 historic drill holes, with logs, skeletonized core, and photographs confirming the presence of graphite mineralization. Titan has assayed Unit 2 intercepts from six core holes drilled by the Company, with an average unit grade of 1.6% graphitic carbon (Cg) and mineralized intercepts averaging 2.5% Cg. The highest returned values were  $\sim 4.5\%$  Cg. Material from these holes is currently undergoing testing at SGS Labs in Lakefield, Ontario to classify the nature of the graphite mineralization, and to begin testing on the processes required to produce a graphite concentrate.

Surface exposures of the graphite mineralization are being mapped and sampled to help in guiding upcoming bulk sample collection and to aid in the development of future exploration programs.

#### **New Mexico**

The Company began prospecting for base metals in an area of New Mexico in 2017. In 2018, the Company completed the first phase of its drilling program and was encouraged by the results. Annual claim maintenance fees have been renewed since allowing the Company to maintain control of the current land position while evaluating future exploration activities. No additional exploration activities were performed on the property during the first three quarters of 2023.

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#### TREND ANALYSIS

## **Selected Quarterly Information**

		2023			20	22	_	2021
	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4
Revenues	15,481	8,952	16,742	13,945	14,025	20,128	13,963	16,399
Net income (loss)	501	(4,841)	1,103	(4,014)	(161)	5,924	(2,618)	1,385
Basic & diluted earnings								
(loss) per share	-	(0.03)	0.01	(0.03)	-	0.04	(0.02)	-
Cash and cash equivalents	4,319	2,895	7,411	6,720	13,568	11,021	3,236	6,041
Total assets	59,060	59,951	67,916	65,999	78,199	78,497	74,755	77,625
Total liabilities	55,528	56,513	58,953	55,486	62,147	59,095	60,352	60,602

Seasonality has a limited impact on the Company's operating results.

Total assets decreased in the first quarter of 2022 mainly due to a decrease of cash, mineral properties, plant and equipment, trade and other receivables, and right-of-use assets, net of additions of inventories and other current assets. Total assets increased in the second quarter of 2022 mainly due to an increase of cash and cash equivalents and inventory, offset by decrease of trade and other receivables, other current assets, mineral properties, plant and equipment, and right-of-use assets. Total assets decreased in the third quarter of 2022 mainly due to a decrease of trade and other receivables, inventories, other current assets, mineral properties, plant and equipment, and right-of-use assets, partially offset by an increase of cash and cash equivalents, derivative asset, and restricted cash. Total assets decreased significantly in the fourth quarter of 2022 mainly due to a decrease of cash and cash equivalents, derivative asset, other current assets, mineral properties, plant and equipment, and right-of-use assets, partially offset by an increase of trade and other receivable and inventories.

Total assets increased in the first quarter of 2023, mainly due to increase of cash and cash equivalents, derivative asset, and other current assets, partially offset by decrease of trade and other receivables, inventories, mineral properties, plant and equipment, and right-of-use assets. Total assets decreased in the second quarter of 2023, mainly due to decrease of cash and cash equivalents, right-of-use assets, trade and other receivables, restricted cash, other assets, and mineral properties, plant and equipment, partially offset by increased of derivative asset, other current assets, and inventories. Total assets decreased in the third quarter of 2023, mainly due to decrease of mineral properties, plant and equipment, derivative asset and inventories, partially offset by increases of cash and cash equivalents, trade and other receivables, right-of-use assets, and other current assets.

Net income turned to net loss in the first quarter of 2022 as a result of a decrease in zinc concentrate sold, and an increase of the operating expenses and foreign exchange loss. Net loss turned to income in the second quarter of 2022 as a result of higher realized zinc prices and lower general and administration expenses and foreign exchange loss, partially offset by higher operating, exploration and evaluation expenses and interest and other finance expenses. Net income turned to net loss again in the third quarter of 2022 as a result of lower realized zinc prices and higher operating, depreciation and depletion, exploration and evaluation expenses, and general and administration expenses, partially offset by higher foreign exchange gain, gain on derivative, and lower interest and other finance expenses. Net loss increased further in the fourth quarter of 2022 as a result of lower realized zinc prices and higher operating expenses, exploration and evaluation expenses, share based compensation, interest and other finance expenses, general and administration expenses, unrealized loss on derivative, loss on Star Mountain settlement, and lower foreign exchange gain, partially offset by realized gain on derivative and gain on modification.

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Net loss turned to net income in the first quarter of 2023 as a result of higher unrealized gain on derivative and foreign exchange gain, and absence of loss on Star Mountain settlement booked in the prior quarter, partially offset by lower realized gain on derivative, gain on loan modification, higher general and administration expenses and interest and other finance expenses. Net income turned to net loss in the second quarter of 2023 as a result of lower revenue and unrealized gain on derivative, higher foreign exchange loss, interest and other finance expenses, partially offset by lower exploration and evaluation expenses, general and administration expenses, and higher realized gain on derivative. Net loss turned to net income in the third quarter of 2023 as a result of higher revenue, lower cost of sales, higher realized gain on derivative, foreign exchange income and other income, partially offset by higher exploration and evaluation expenses, interest and other finance expenses, and higher unrealized loss on derivative.

Cash and cash equivalents decreased in the first quarter of 2022 as a result of a decrease in zinc concentrate sold and an increase of operating expenses. Cash and cash equivalents increased in the second quarter of 2022 as a result of an increase in zinc concentrate sold and a decrease of operating expenses and fewer capital additions at ESM. Cash and cash equivalents increased in the third quarter of 2022 as a result of higher working capital generated from trade and other receivables, inventories, and accounts payable and accrued liabilities, partially offset by a loss for the period and higher cash used in financing and investing activities. Cash and cash equivalents decreased significantly in the fourth quarter of 2022 as a result of lower working capital generated from trade and other receivables, inventories, accounts payable and accrued liabilities, and higher cash used in financing and investing activities.

Cash and cash equivalents increased in the first quarter of 2023 as a result of net cash provided in operating activities, and less cash spent on financing activities, partially offset by cash spent on capital assets. Cash and cash equivalents decreased in the second quarter of 2023 as a result of higher cash used in operating activities, partially offset by less cash spent on capital assets and more cash generated from financing activities. Cash and cash equivalents increased in the third quarter of 2023 as a result of more cash generated in operating activities, and less cash spent on capital assets, partially offset by more cash generated in financing activities.

#### FINANCIAL REVIEW

#### **Financial Results**

(\$000's)	Three months ended September 30	Nine months ended September 30
Net income for the 2022 period Increase (decrease) in components of income:	\$ (161)	\$ 3,145
Revenues	1,456	(6,941)
Cost of sales	2,764	(2,763)
Other expenses (income)	(3,558)	3,322
Net income (loss) for the 2023 period	\$ 501	\$ (3,237)

During the three months ended September 30, 2023, revenues increased compared to the same period in 2022 as a result of higher volume of zinc concentrate sold (Q3 2023 – 18.3 mlbs vs. Q3 2022 – 12.6 mlbs), and positive provisional and final pricing adjustments (Q3 2023 – \$1,029 vs. Q3 2022 – negative \$932). During the nine months ended September 30, 2023, revenues decreased compared to the same period in 2022 as a result of zinc concentrate sold (YTD Q3 2023 – 48.2 mlbs vs. YTD Q3 2022 – 38.0 mlbs) at a lower average provisional price (YTD Q3 2023 - \$1.21/lb vs. YTD Q3 2022 - \$1.49/lb) and negative provisional and final pricing adjustments (YTD Q3 2023 – negative \$2,951 vs. YTD Q3 2022 – negative \$2,738).

During the three months ended September 30, 2023, cost of sales decreased due to cost savings in all categories of operating expenses even though higher volume of tons mined and milled. In the nine months ended

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September 30, 2023, cost of sales increased with the increased volume of tons milled and inflationary operating expenditure increases.

During the three months ended September 30, 2023, other expenses decreased compared to the same period of 2022 due to increases of realized gain on derivative and other income, decreases of exploration and evaluation expenses, office and administration expenses, partially offset by an increase of unrealized gain on derivative, foreign exchange income, interest and other finance expenses, accretion expense, and decreases of interest income.

During the nine months ended September 30, 2023, other expenses decreased compared to the same period of 2022 due to increases of realized and unrealized gain on derivative, foreign exchange income, other income, interest income, and a decrease of office and administration expenses, partially offset by increases of exploration and evaluation expenses, interest and other finance expenses, and accretion expense.

#### Revenue

	 Three months ended September 30,						Nine months ended September 30,					
(\$000's)	2023		2022	2022 Change			2023		2022		Change	
Zinc concentrate sales	\$ 20,125	\$	18,805	\$	1,320	\$	58,433	\$	61,259	\$	(2,826)	
Zinc concentrate provisional pricing adjustments	1,029		(932)		1,961		(2,951)		(2,738)		(213)	
Smelting and refining												
charges	(5,673)		(3,848)		(1,825)		(14,307)		(10,405)		(3,902)	
Revenue, net	\$ 15,481	\$	14,025	\$	1,456	\$	41,175	\$	48,116	\$	(6,941)	

Revenues were higher during the three months ended September 30, 2023 than the same period of 2022 due to higher volume of zinc concentrate sold. Revenues were lower during the nine months ended September 30, 2023 than the same period of 2022 due to zinc concentrate sold at a lower average provisional price. Specifically, revenues for the three months ended September 30, 2023 include sales of 18.3 million payable pounds of zinc (Q3 2022 – 12.6 million) at an average realized price per pound of \$1.10 (Q3 2022 – \$1.49). Revenues for the nine months ended September 30, 2023 include sales of 48.2 million payable pounds of zinc (YTD Q3 2022 – 38.0 million) at an average realized price per pound of \$1.21 (YTD Q3 2022 – \$1.61).

#### Cost of sales

	Three months ended September 30,					Nine months ended September 30,					
(\$000's)	2023		2022		Change		2023		2022		Change
Operating expenses	\$ 8,607	\$	10,217	\$	(1,610)	\$	30,860	\$	30,162	\$	698
Transportation costs	982		805		177		2,808		2,362		446
Royalties	10		4		6		30		23		7
Depreciation and depletion	2,984		3,404		(420)		9,058		8,792		266
Change of Inventory	162		1,079		(917)		1,292		(54)		1,346
Total	\$ 12,745	\$	15,509	\$	(2,764)	\$	44,048	\$	41,285	\$	2,763

In the three months ended September 30, 2023, cost of sales decreased compared to the same period in 2022 due to decreases in operating expenses, depreciation and change of inventory. Operating expenses decreased due to cost savings on overtime salaries and benefits. Depreciation and depletion expense decreased comparatively due to some capital assets beingfully amortized in early 2023. Change of inventory decrease is a result of the ending inventory level change due to timing differences of sales of zinc concentrate.

In the nine months ended September 30, 2023, cost of sales increased compared to the same period in 2022 due to inflationary increases in operating expenses and transportation costs. Royalties, depreciation, and change of inventory also increased compared to the same period in 2022. The increase in operating expenses

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was due to a higher number of tons milled (YTD Q3 2023- 337,000 tons vs. YTD Q3 2022 – 312,000 tons) and inflationary pressures. Depreciation and depletion expense increased comparatively due to a higher number of tons mined.

The impact of inflation on the Company's financial position, operational performance, or cash flows over the next twelve months cannot be determined with any degree of certainty.

#### Other income

	Thre	onths e	nde	ed Septem	ber 30,	Nine months ended September 30,						
	2023		2022		Change	%		2023		2022	Change	%
G&A expenses:												
Salaries and benefits	\$ 221	\$	218	\$	3	1	\$	1,021	\$	963	58	6
Share-based compensation	99		14		85	>100		293		60	233	>100
Professional fees	235		1,875		(1,640)	(87)		1,562		2,185	(623)	(29)
Office and administration	164		157		7	4		671		470	201	43
Investor relations	16		12		4	33		43		35	8	23
	\$ 735	\$	2,276	\$	(1,541)	(68)	\$	3,590	\$	3,713	(123)	(3)
<b>Exploration and evaluation</b>												
("E&E") expenses:												
Salaries and benefits	\$ 136	\$	115	\$	21	18	\$	412	\$	342	70	20
Assay and analyses	9		47		(38)	(81)		141		105	36	34
Contractors and consultants	269		342		(73)	(21)		807		910	(103)	(11)
Other	43		45		(2)	(4)		160		154	6	4
	\$ 457	\$	549	\$	(92)	(17)	\$	1,520	\$	1,511	9	1

G&A expenses for the three months ended September 30, 2023 have decreased 68% compared to the same period ended September 30, 2023 as a result of decreases in professional fees, partially offset by increases of share-based compensation, office and administration expenses, and investor relations.

G&A expenses for the nine months ended September 30, 2023 have decreased 3% compared to the same period ended September 30, 2022 as a result of decreases in professional fees, partially offset by increases of salaries and benefits, share-based compensation, office and administration expenses, and investor relations.

E&E expenses for the three months ended September 30, 2023 decreased 17% compared to the same period in 2022 as a result of decreases in contractors and consultants, assay and analyses, and others, partially offset by increase of salaries and benefits.

E&E expenses for the nine months ended September 30, 2023 increased 1% compared to the same period in 2022 as a result of increases in salaries and benefits, assay and analyses, and others, partially offset by decrease of contractors and consultants.

#### Other expenses (income)

Three mo	nths ended	Septembe	er 30,	Nine months ended September 30,					
2023	2022	Change	%	2023	2022	Change	%		
\$ 1,042	\$(4,148)	\$ 5,190	<(100)	\$(4,747)	\$ (1,538)	\$ (3,209)	>100		

For the three months ended September 30, 2023, other expenses increased compared to the same period of 2022. The increase was primarily due to increases in interest and other finance expenses, unrealized loss on derivative, accretion expense, and decreases of interest income and foreign exchange loss, partially offset by increases of realized gains on derivative, and other income.

For the nine months ended September 30, 2023, other expense decreased significantly compared to the same period of 2022. The decrease was primarily due to increases in realized gains on derivative, foreign exchange

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gain, interest income, and other income, partially offset by an increase of interest and other finance expenses, accretion expense, and unrealized gains on derivative.

## LIQUIDITY AND CAPITAL RESOURCES

#### **Credit Facilities**

Bank of Nova Scotia

On January 21, 2019, the Company and the Bank of Nova Scotia ("Lender") amended the \$15,000 secured credit agreement (the "BNS Credit Facility") whereby a maximum of \$10,000 (the "Available Credit") was available to the Company on a revolving basis. Prior to March 31, 2019, the Lender was permitted to reduce the maximum amount available to \$6,000, subject to the business and financial plan provided by the Company. The interest rate on the Available Credit is either LIBOR plus 4.25% or the Lender's base rate plus 3.25%, and the standby fee is 0.8% of the unadvanced portion of the BNS Credit Facility. If the amount available is reduced to \$6,000, the interest rate changes to LIBOR plus 2.25% or the Lender's base rate plus 1.25%, and the standby fee is 0.5625% of the unadvanced portion of the BNS Credit Facility. A \$6,000 guarantee was provided by a company controlled by Titan's Executive Chairman.

On May 31, 2019, the Company and the Lender further amended the BNS Credit Facility whereby the Available Credit limit continues as \$10,000 and the maturity date was extended to April 3, 2021. The interest rate on the Available Credit was changed to LIBOR plus 2.25% or the Lender's base rate plus 1.25%. In addition, the financial covenant requirement on the BNS Credit Facility was removed.

In connection with the amendment, a \$10,000 guarantee has been provided by a company controlled by Titan's Executive Chairman (the "Guarantor"), replacing the original \$6,000 guarantee. In consideration for the guarantee, the Company issued 3,000,000 common shares with a fair value of \$979 and 3,000,000 share purchase warrants with each warrant exercisable for one common share at price of \$0.50 per share for a period of five years from the date of issuance with a fair value of \$543 at the guarantee effective date for a total fair value of \$1,522 recorded as borrowing costs. Such common shares and share purchase warrants were issued on June 14, 2019. The fair market values on the issuance date were \$919 and \$493, respectively. The difference of \$110 was recorded as a gain on derivative liability during the year ended December 31, 2019.

As a result of the amendment, the Company extinguished the face value of the loan prior to the amendment and recorded the fair value of the new loan as at May 31, 2019. A \$1,702 loss on the extinguishment of debt was recorded during the year ended December 31, 2019.

On January 8, 2021, the Company and the Lender further amended the \$15,000 BNS Credit Facility whereby the Available Credit limit continues as \$10,000 and the maturity date was extended to April 3, 2022.

On December 20, 2021 the Company and the Lender further amended the \$15,000 BNS Credit Facility whereby the Available Credit limit continues as \$10,000 and the maturity date was extended to April 3, 2023. A \$2,000 payment was made against the Facility in the fourth quarter reducing the principal value to \$8,000 leaving the Company with \$2,000 of available credit as at December 31, 2021.

On June 6, 2022 the Company repaid the balance of the BNS Credit Facility and associated interest and retired the loan.

## Loan from Related Party

On November 30, 2018, the Company entered a credit agreement with a company controlled by Titan's Executive Chairman, to establish a \$18,710 subordinate general security credit facility ("Loan"). The initial advance of \$3,710 bears interest at 8% per annum and advances on the subsequent \$15,000 bear interest at a floating rate equal to 7% plus the greater of (i) LIBOR and (ii) 1%, per annum. Interest is payable in cash or shares of the Company. The Loan is subject to mandatory prepayment if the Company closes one or more

## Management's Discussion and Analysis

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financings that exceeds \$30,000 in the aggregate or upon the occurrence of a change of control of the Company. The Loan is a non-revolving facility, and any repayment under the Loan shall not be re-borrowed. The Company is subject to certain general covenants with respect to the Loan.

Pursuant to the Loan, the Company was required to issue the related party 2,500,000 warrants. Each warrant entitles the holder to acquire one common share at a price of C\$1.40 per share.

On January 21, 2019, the Company issued 2,500,000 warrants to a company controlled by Titan's Executive Chairman pursuant to the credit agreement. The fair market value of these warrants was \$1,099 as at December 31, 2018 and was recorded as a warrant derivative liability and borrowing costs. The fair market value on the issuance date on January 21, 2019 was \$1,028. The difference between December 31, 2018 and the issuance date was recorded as a gain on derivative liability of \$71 during the year ended December 31, 2019.

On August 21, 2019, the Company entered an addendum to its Loan which made an additional \$1,000 available to the Company under the same terms as the original agreement. As such, the Loan was increased to a total of \$19,710.

On February 6, 2020, the Company was advanced an additional \$1,000 under the same terms as the original agreement. As such, the Loan was increased to a total of \$20,710.

On October 13, 2020, the Company repriced 2,500,000 warrants held by a company controlled by Titan's Executive Chairman in connection with the Credit Agreement between the Company and the lender pursuant to which the lender advanced to the Company a second-ranking secured non-revolving credit facility of up to \$20,710. The exercise price of the warrants was repriced from C\$1.40 to C\$0.75. In consideration for the repricing, the due date for repayment of the Facility was extended by one additional year from November 30, 2020 to November 30, 2021. On December 31, 2020 the lender agreed to extend the term of the credit facility to April 5, 2022. An extension fee of \$71 was paid by the Company and was recorded in the Consolidated Statement of Income (Loss) and Other Comprehensive Income (Loss) for the year ended December 31, 2020. \$291 was recorded as an incremental borrowing cost related to the warrant repricing of the credit agreement which will be amortized over the remaining term of the agreement. As at December 31, 2020, the balance of this incremental borrowing costs was adjusted to \$338 after the loan extension.

On December 20, 2021 the lender agreed to further extend the term of the credit facility to April 5, 2023. An extension fee of \$75 was paid by the Company and was recorded in the Consolidated Statement of Income (Loss) and Other Comprehensive Income (Loss) for the year ended December 31, 2021. The incremental borrowing costs from the 2020 loan extension were amortized during the year and the balance was \$76 as of December 31, 2021.

On June 6, 2022 the Company repaid the balance of the Loan and associated interest and retired the loan.

## Promissory Note - November 1, 2023

To remain compliant with the financial covenants under the Credit Facility with National Bank of Canada the Company made a \$5,000 payment against the principal amount of the Credit Facility on November 1, 2023. In order to fund the payment to National Bank, the Company entered into a Promissory Note with a company controlled by Titan's Executive Chairman, the ("Lender"). Terms of the Promissory Note are as follows:

- \$5,000 loan principal and an Initiation Fee of \$350 aggregating to \$5,350
- Interest at 10% compounded annually commencing on November 1, 2023
- Repayment date of May 1, 2025
- Promissory note is subordinate to the Company's Credit Facility with National Bank

Titan granted the Lender six million share purchase warrants at market price for a term of five years in connection with obtaining the financing.

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#### National Bank of Canada

On June 6, 2022, the Company entered into a secured credit agreement for \$40,000 (the "Credit Facility") with National Bank of Canada. The Credit Facility is secured by a general charge on the assets of the Company, and was used to consolidate the Company's previously existing loans with Bank of Nova Scotia and the Company's Executive Chairman, and is available to the Company on a revolving basis to finance the working capital and general corporate requirements. In addition to the Credit Facility, National Bank provided the Company with an up to \$15 million treasury line enabling additional access to funds for future zinc contract commitments. Terms of the Credit Facility include the following:

- The Credit Facility will bear interest at the Secured Overnight Financing Rate plus 2.25% or National Bank's base rate plus 1.25%;
- The Company is required to pay a standby fee on the unadvanced portion of the Credit Facility at a rate of 0.5625% per annum;
- The maturity date is December 6, 2023 and includes an annual extension option; the maturity date was subsequently extended to December 6, 2024 on December 20, 2022.
- The Credit Facility is subject to covenants that require the Company to maintain interest coverage ratio of not less than 4.0 to 1.0 and a total leverage ratio of not more than 3.0 to 1.0. At September 30, 2023 Titan was in breach of the covenants and obtained waiver from National Bank on covenants for the period of June 30, 2023 to December 31, 2023. In obtaining the waiver, the Company agreed to changes to the Credit Facility, namely capping the available credit at \$37,170, adding an additional covenant that requires the Company to have \$1,500 of unrestricted cash at all times and making a payment against the Credit Facility of \$5,000 by November 1, 2023, which payment was made by the required date. Subsequent to making the November 1, 2023 payment the Credit Facility was reduced to \$31,170. A guarantee for the Credit Facility was provided by a company controlled by Titan's Executive Chairman with a guarantee fee applicable to the \$40,000 amount at an annual rate of 1.125%. The guarantee was extended to December 6, 2024 concurrent with the extension of the maturity date of the Credit Facility. A total guarantee fee of \$337 was accrued and paid in the first three quarters of 2023.

The Company withdrew additional \$5,900 on June 9, 2023.

## **Financial Condition**

	Septem	ber 30, 2023	December 31, 2022			
Cash and cash equivalents	\$	4,319	\$	6,720		
Total debt	\$	37,245	\$	30,032		
Net debt (cash) <sup>(1)</sup>	\$	32,926	\$	23,312		
Working capital	\$	15,426	\$	7,289		

(1) Net debt is a non-GAAP measure. This term is not a standardized financial measure under IFRS and might not be comparable to a similar financial measure disclosed by other issuers. See "Non-GAAP performance measures" of this MD&A for a discussion of non-GAAP performance measures.

Cash and cash equivalents as at September 30, 2023 decreased by \$2,401 compared to December 31, 2022. Lower cash was generated from positive operating cash flows before changes in working capital of \$7,448 during the nine months period ended September 30, 2023 (YTD Q3 2022 –\$12,740), and cash outflow from changes in non-cash working capital of \$10,664 (YTD Q3 2022 – cash inflow \$2,455). Cash inflow related to financing activities was \$2,356 (YTD Q3 2022 – negative \$4,214). The Company received proceeds from National Bank and warrant exercises, partially offset by interest payments of bank indebtedness, payments of lease liabilities, and dividends paid. Additional spending related to investing activities of \$2,436 (YTD Q3 2022 – \$3,694) and the effect of foreign exchange of \$895 (YTD Q3 2022 – \$240) on cash and cash equivalents.

## Management's Discussion and Analysis

(In thousands of US Dollars, unless otherwise indicated)

At September 30, 2023, the Company's debt was comprised of a loan from the Credit Facility of \$36,283. The Company accrued interest of \$962 and amortized borrowing cost of \$535 related to the Credit Facility for the nine months ended September 30, 2023.

Working capital increased for the period ended September 30, 2023 compared to December 31, 2022 as a result of higher trade and other receivables, derivative asset, inventory, other current assets, and lower accounts payable and accrued liabilities, partially offset by lower cash and cash equivalents, and higher current portion of lease liabilities, and current portion of debt.

### **Cash Flows**

	Nine Months Ended September 30,						
	2023		2022		Change		
Operating cash flows before changes in working capital	\$ 7,448	\$	12,740	\$	(5,292)		
Changes in working capital	(10,664)		2,455		(13,119)		
Net cash flows generated by (used in) operating activities	(3,216)		15,195		(18,411)		
Net cash flows generated by (used in) financing activities	2,356		(4,214)		6,570		
Net cash flows generated by (used in) investing activities	(2,436)		(3,694)		1,258		
	\$ (3,296)	\$	\$7,287	\$	(10,583)		

Net cash flows generated from operating activities were lower in the first three quarters of 2023 than the same period in 2022 as a result of less cash generated from decreased zinc sales on lower average concentrate zinc price, higher cash used from trade and other receivable, inventories, accounts payable and accrued liabilities, and cash settlement for Star Mountain, partially offset by higher cash flows generated in release of restricted cash and less unrealized gain on derivative. A discussion of the changes from period to period is set out above under "Financial Results" and "Other Operating Expenses".

Net cash flows used in investing activities in the period ended September 30, 2023 were lower compared with the same period in 2022 as the Company spent less on capital equipment.

Net cash flows generated in financing activities during the period ended September 30, 2023 reflect \$5,900 of bank indebtedness proceeds, \$130 of warrant exercise proceeds, \$2,102 of dividends paid, \$1,494 of interest payments, \$63 of payment of lease liabilities, and \$15 of repayment of equipment loans. For comparison, Net cash flows used in financing activities by the Company in the same period in 2022 reflect \$35,779 of bank indebtedness proceeds, \$8,000 of bank indebtedness repayment, \$20,710 of related party loan repayment, \$3,222 of dividends paid, \$7,692 of associated interest payments, \$365 of payments made on lease liabilities, and \$4 of repayment of equipment loans.

#### **Capital Expenditures**

The Company invested \$2,436 in capital assets in the nine months ended September 30, 2023 compared to \$3,694 capital expenditures made in the same period of 2022. A new telehandler, a scissor truck, a weasel drill, two transformers, and a scooptram were added to the mobile equipment fleet and additional expenditures were made on development of the Turnpike, primarily road building.

#### Liquidity

As at September 30, 2023, the Company had total liquidity of \$4,319 in cash and cash equivalents. The Company had working capital of \$15,426 and a deficit of \$60,473. For the period ended September 30, 2023, the Company had positive operating cash flows before changes in working capital of \$7,448 and a net loss of \$3,237. On June 14, 2023, the Company announced that it temporarily suspended the payment of its quarterly dividend in order to preserve capital and strengthen its balance sheet as it navigates the downturn in zinc prices. The Company continues to monitor zinc prices and the impact on financial covenants associated with the Credit Facility.

## Management's Discussion and Analysis

(In thousands of US Dollars, unless otherwise indicated)

As at December 31, 2022, the Company had total liquidity of \$6,720 in cash and cash equivalents and \$8,730 undrawn on its Credit Facility with National Bank of Canada. The Company had working capital of \$7,289 and a deficit of \$57,067. For the year ended December 31, 2022, the Company had positive operating cash flows before changes in working capital of \$15,055 and a net loss before tax of \$870.

#### **Capital Management**

The Company's objectives when managing capital are to safeguard the Company's ability to continue as a going concern in order to pursue the development and exploration of its mineral properties, pay dividends to its shareholders and to maintain a flexible capital structure, which optimizes the costs of capital to an acceptable risk.

The capital structure of the Company currently consists of common shares, loans, debt and the balance of the acquisition obligations. The Company manages the capital structure and adjusts it in response to changes in economic conditions, its expected funding requirements, and risk characteristics of the underlying assets. The Company's funding requirements are based on cash forecasts. In order to maintain or adjust the capital structure, the Company may issue new debt, new shares and/or consider strategic partners. Management reviews its capital management approach on a regular basis. The Company anticipates being able to generate sufficient amounts of cash and cash equivalents, in the short and long term, to maintain the Company's capacity and to fund development activities.

#### **Contractual obligations and commitments**

The Company's contractual obligations and commitments as at September 30, 2023 and their approximate timing of payment are as follows:

	< 1 year	1 to 3 years		4 – 5 years		>5 years	Total
Debt:							_
Repayment of principal	\$ -	\$ 36,283	\$	-	\$	-	\$ 36,283
Repayment of interest	962	-		-		-	962
Leases	118	20		-		-	138
Reclamation and remediation provision	-	-		-		15,339	15,339
	\$ 1,080	\$ 36,303	\$	-	\$	15,339	\$ 52,722

#### **Off-Balance Sheet Arrangements**

The Company does not have any off-balance sheet arrangements.

## **Outstanding Securities**

As of the date of this MD&A, the Company had 136,366,599 common shares issued, 22,146,656 warrants and 6,970,000 options outstanding.

#### FINANCIAL INSTRUMENT

### a) Carrying amount versus fair value

Set out below is a comparison by class of the carrying amounts and fair value of the Company's financial instruments, other than those whose carrying amounts are a reasonable approximation of fair value:

## **Management's Discussion and Analysis**

(In thousands of US Dollars, unless otherwise indicated)

	Sep	temb	er 30, 2023		De	cemb	er 31, 2022
	 Carrying		_	-	Carrying		
	amount		Fair value		amount		Fair value
Financial liabilities							_
Lease liabilities	\$ 132	\$	79	\$	192	\$	127
Bank indebtedness	\$ 37,245	\$	37069	\$	30,016	\$	31,115
Equipment loans	\$ -	\$	-	\$	16	\$	14

Management assessed that the fair values of cash and cash equivalents, restricted cash, other current assets, other receivables, accounts payable, and dividends payable approximate their carrying amounts due to the short-term maturities of these instruments, and the fair value of acquisition obligations approximate their carrying value as they are non-interest bearing. Trade receivables subject to provisional pricing and derivative asset are already carried at fair value.

Fair values of the Company's lease liabilities, bank indebtedness, equipment loans, and loan from related-party are determined by using discounted cash flow models that use discount rates that reflect the issuer's borrowing rate as at the end of the reporting period. The fair value of the derivative asset is determined using discounted cash flow models that incorporate commodity forward prices, credit risk adjustments and discount rates.

The fair value hierarchy establishes three levels to classify the inputs to valuation techniques used to measure fair value.

Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2 inputs are quoted prices in markets that are not active, quoted prices for similar assets or liabilities in active markets, inputs other than quoted prices that are observable for the asset or liability (interest rate, yield curves), or inputs that are derived principally from or corroborated observable market data or other means.

Level 3 inputs are unobservable (supported by little or no market activity). The fair value hierarchy gives the highest priority to Level 1 inputs and the lowest priority to Level 3 inputs

All financial instruments measured at fair value use Level 2 valuation techniques.

There have been no transfers between fair value levels during the reporting period.

#### b) Derivatives

In August 2022, the Company entered into a Monthly Cash Settled LME Zinc Swap contract with National Bank of Canada for approximately 50% of the Company's zinc production for the period of August 2022 to December 2022 at a price of \$1.615 per pound of zinc.

In the first quarter of 2023, the Company entered into a Monthly Cash Settled LME Zinc Swap contract with National Bank of Canada for approximately 30% of the Company's zinc production for the period of February 01, 2023 to December 31, 2023 at a price of \$1.55 per pound of zinc.

For the year ended December 31, 2022, the Company recognized \$1,733 of realized gain on settlement of swaps, and \$473 of unrealized gains from changes in the fair value of open positions. This derivative asset shown in the statements of financial position at December 31, 2022 was received on January 2, 2023.

For the nine months ended September 30, 2023, the Company recognized \$4,006 of realized gain on settlement of swaps, and \$2,170 of unrealized gains from changes in the fair value of open positions.

## Management's Discussion and Analysis

(In thousands of US Dollars, unless otherwise indicated)

## **RELATED PARTY TRANSACTIONS**

## Management company (Manco)

The Company shares office space, equipment, personnel, consultants and various administrative services with other companies related by virtue of certain directors and management in common. These services have been provided through a management company equally owned by each company party to the arrangement. Costs incurred by the management company are allocated and funded by the shareholders of the management company based on time incurred and use of services. If the Company's participation in the arrangement is terminated, the Company will be obligated to pay its share of the rent payments for the remaining term of the officed space rental agreement. The Company's obligation for future rental payments on September 30, 2023 was approximately \$188, determined based on the Company's average share of rent paid in the immediately preceding 12 months.

The Company was charged for the following with respect to this arrangement in the period ended September 30, 2023.

	Thr	Nii	Nine months ended					
		Se	ptember30,		September 30,			
	2023		2022		2023		2022	
Salaries and benefits	\$ 91	\$	85	\$	390	\$	371	
Office and other	42		7		147		43	
Marketing and travel	5		4		12		13	
	\$ 138	\$	96	\$	549	\$	427	

### Key management personnel compensation

Key management personnel include those persons having authority and responsibility for planning, directing and controlling the activities of the Company, and comprises the Company's Executive Chairman, President and Chief Executive Officer, Chief Financial Officer, and Directors.

	Thr	Nir	Nine months ended					
		Sept	tember 30,		September 30,			
	2023		2022		2023		2022	
Salaries and benefits	\$ 114	\$	150	\$	644	\$	621	
Consulting fees	45		30		358		205	
Share-base compensation	86		14		256		41	
Directors' fees	55		55		164		164	
	\$ 300	\$	249	\$	1,422	\$	1,031	

	September30,	December 31,
	2023	2022
Salaries and benefits payable	\$ 407	\$ 406
	\$ 407	\$ 406

## Management's Discussion and Analysis

(In thousands of US Dollars, unless otherwise indicated)

#### ACCOUNTING CHANGES AND CRITICAL ESTIMATES

### **Estimates and judgments**

The preparation of consolidated financial statements in accordance with IFRS requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the year. Actual outcomes could differ from these estimates. These consolidated financial statements include estimates which, by their nature, are uncertain. The impacts of such estimates are pervasive throughout the financial statements and may require accounting adjustments. Revisions to accounting estimates are recognized in the period in which the estimate is revised and future years if the revision affects both current and future years.

These estimates are based on historical experience, current and future economic conditions and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

Significant assumptions and judgments about the future and other sources of estimation uncertainty that management has made at the end of the reporting period, which could result in a material adjustment to the carrying amounts of assets and liabilities, in the event that actual results differ from assumptions made, relate to the following areas:

- Estimated mineral resources;
- Revenue recognition
- Reclamation and remediation provision;
- Impairment;
- Fair value measurement
- Determination of useful life of assets for depreciation purposes;
- Share-based compensation;
- Taxation

See note 3 of our 2022 annual audited consolidated financial statements for a detailed discussion of these accounting estimates and judgments.

#### DISCLOSURE CONTROLS AND PROCEDURES AND INTERNAL CONTROL OVER FINANCIAL REPORTING

The Company's management, under the supervision of the Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), have designed disclosure controls and procedures ("DC&P") and internal control over financial reporting ("ICFR"), as defined in National Instrument 52-109, *Certification of Disclosure in Issuers' Annual and Interim Filings*, based on the 2013 control framework developed by the Committee of Sponsoring Organizations of the Treadway Commission.

The DC&P have been designed to provide reasonable assurance that material information relating to the Company is made known to the CEO and CFO, particularly during the period in which the interim filings are prepared and the information required to be disclosed by the Company in its annual filings, interim filings or other reports filed or submitted by it under securities legislation is recorded, processed, summarized and reported within the time periods specified. The ICFR has been designed to provide reasonable assurance regarding the reliability of financial reporting for external purposes in accordance with international financial reporting standards. Due to the inherent limitations associated with any such controls and procedures, management recognizes that, no matter how well designed, they may not prevent or detect misstatements on a timely basis.

## Management's Discussion and Analysis

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#### CHANGES IN INTERNAL CONTROL OVER FINANCIAL REPORTING

NI 52-109 also requires Canadian public companies to disclose any changes in ICFR during the most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, ICFR. No material changes were made to internal controls in the quarter ended September 30, 2023.

#### NOTES TO READER

#### Cautionary note regarding forward-looking information

Certain information contained in this document constitutes forward-looking statements. All statements, other than statements of historical facts, are forward looking statements, including but not limited to that Titan believes that the district surrounding ESM remains underexplored despite the long operating history of ESM; the nature, extent, location, and timing of future exploration and testing at ESM; that testing at targets prioritized for surface sampling, mapping and drilling occurs as scheduled, if at all; increased productivities are expected to continue into 2023 and have better positioned the mine for future success; the timing and results of construction and mining at the Turnpike project; production guidance; exploration plans at the Kilbourne target and timing of such plans; that Titan has an aggressive plan to fast-track exploration and development with goal of being first domestic supplier of materials to the electric vehicle (EV) battery market; that the Company continues to examine various financing options to bolster the Company's treasury; that the Company may require additional funding in the next twelve months; and that the Company expects that it will continue to obtain funding through similar or other means depending on market conditions and other relevant factors at the time. Forward-looking statements are often, but not always, identified by the use of words such as may, will, seek, anticipate, believe, plan, estimate, budget, schedule, forecast, project, expect, intend, or similar expressions.

The forward-looking statements are based on a number of assumptions which, while considered reasonable by the Company, are subject to risks and uncertainties. The Company cautions readers that forward-looking statements involve and are subject to known and unknown risks, uncertainties and other factors which may cause actual results, performance or achievements to differ materially from those expressed in or implied by such forward looking statements and forward-looking statements are not guarantees of future results, performance or achievement. The Company has made assumptions based on or related to many of these risks. uncertainties and factors. These risks, uncertainties and factors include 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; the ability to obtain financing on acceptable terms in a timely manner; contests over title to properties; risks of making a production decision at Turnpike (formerly Sphaleros) that is not based on a technical report; employee relations and shortages of skilled personnel and contractors; the speculative nature of, and the risks involved in, the exploration, development and mining business; and the factors discussed in the section entitled "Risks Factors" in the Company's most recent annual information form filed on SEDAR.

Although the Company has attempted to identify important risks, uncertainties and other factors that could cause actual performance, achievements, actions, events, results or conditions to differ materially from those expressed in or implied by the forward-looking information, there may be other risks, uncertainties and other factors that cause performance, achievements, actions, events, results or conditions to differ from those anticipated, estimated or intended. Unless otherwise indicated, forward-looking statements contained herein

## Management's Discussion and Analysis

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are as of the date hereof and the Company disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or results or otherwise, except as required by applicable law.

#### **Risk Factors**

The Company's activities and related results are subject to a number of different risks at any given time. A summary of the Company's financial instruments risk exposure is provided in the Financial Instruments section of the Company's 2022 Annual Financial Statements. For a comprehensive list of other risks and uncertainties affecting our business, please refer to the sections entitled "Risk Factors" in both our most recent Annual Information Form and Annual MD&A, which are available at <a href="https://www.sedar.com">www.sedar.com</a>.

#### **Qualified Person**

The technical and scientific information in this MD&A has been reviewed and approved by Donald R. Taylor, MSc., PG, President and Chief Executive Officer of the Company, a qualified person for the purposes of NI 43-101. Mr. Taylor has more than 25 years of mineral exploration and mining experience and is a Registered Professional Geologist through the SME (registered member #4029597).

For additional information, please see the technical report titled "Empire State Mines 2021 NI 43-101 Technical Report (Amended) with an effective date of February 24, 2021, filed on SEDAR at <a href="www.sedar.com">www.sedar.com</a>.

For additional information related to the Kilbourne target, see the Company's news release titled, "Titan Mining Announces Significant Graphite Discovery at Empire State Mines in Upstate New York, USA" dated October 23, 2023.

## Non-GAAP performance measures

This document includes non-GAAP performance measures, discussed below, that do not have a standardized meaning prescribed by IFRS. The performance measures may not be comparable to similar measures reported by other issuers. The Company believes that these performance measures are commonly used by certain investors, in conjunction with conventional GAAP measures, to enhance their understanding of the Company's performance. The Company uses these performance measures extensively in internal decision-making processes, including to assess how well ESM is performing and to assist in the assessment of the overall efficiency and effectiveness of the mine site management team. The tables below provide a reconciliation of these non-GAAP measures to the most directly comparable IFRS measures as contained within the Company's issued financial statements.

#### C1 cash cost per payable pound sold

C1 cash cost is a non-GAAP measure. C1 cash cost represents the cash cost incurred at each processing stage, from mining through to recoverable metal delivered to customers, including mine site operating and general and administrative costs, freight, treatment and refining charges.

The C1 cash cost per payable pound sold is calculated by dividing the total C1 cash costs by payable pounds of metal sold.

## **All-In Sustaining Cost (AISC)**

AISC measures the estimated cash costs to produce a pound of payable zinc plus the estimated capital sustaining costs to maintain the mine and mill. This measure includes the C1 cash cost and capital sustaining costs divided by pounds of payable zinc sold. AISC does not include depreciation, depletion, amortization, reclamation and exploration expenses.

## Management's Discussion and Analysis

(In thousands of US Dollars, unless otherwise indicated)

## Sustaining capital expenditures

Three months ended September 30,					ber 30,	Nine months ended September 30,								
				2023			2022				2023			2022
C1 cash cost per				Per			Per				Per			Per
payable pound		Total		pound	Total		pound		Total		pound		Total	pound
Pounds of														
payable zinc sold														
(millions)				18.3			12.6				48.2			38.0
Operating														
expenses and														
selling costs	\$	9,761	\$	0.53	\$ 12,105	\$	0.96	\$	34,991	\$	0.72	\$	32,493	\$ 0.85
Concentrate														
smelting and														
refining costs		5,673		0.31	3,848		0.30		14,307		0.30		10,405	0.27
Total C1 cash														
cost	\$	15,434	\$	0.84	\$ 15,953	\$	1.26	\$	49,298	\$	1.02	\$	42,898	\$ 1.12
Sustaining														
Capital														
Expenditures	\$	425	\$	0.02	\$ 268	\$	0.02	\$	1,944	\$	0.04	\$	2,143	\$ 0.06
AISC	\$	15,859	\$	0.86	\$ 16,221	\$	1.28	\$	51,242	\$	1.06	\$	45,041	\$ 1.18

Sustaining capital expenditures are defined as those expenditures which do not increase payable mineral production at a mine site and excludes all expenditures at the Company's projects and certain expenditures at the Company's operating sites which are deemed expansionary in nature. Expansionary capital expenditures are expenditures that are deemed expansionary in nature. The following table reconciles sustaining capital expenditures and expansionary capital expenditures to the Company's additions to mineral, properties, plant and equipment (or total capital expenditures):

	Nine months ended September 30				
	2023		2022		
Sustaining capital expenditures	\$ 1,944	\$	2,143		
Expansionary capital expenditures	588		1,851		
Additions to mineral, properties, plant and equipment	\$ 2,532	\$	3,994		

#### **Net Debt**

Net debt is calculated as the sum of the current and non-current portions of long-term debt, net of the cash and cash equivalent balance as at the balance sheet date. A reconciliation of net debt is provided below.

	September 30, 2023	December 31, 2022
Current portion of debt	\$ 962	\$ 176
Non-current portion of debt	36,283	29,856
Total debt	\$ 37,245	\$ 30,032
Less: Cash and cash equivalents	(4,319)	(6,720)
Net debt	\$ 32,926	\$ 23,312

**Management's Discussion and Analysis** (In thousands of US Dollars, unless otherwise indicated)

## Free Cash Flow

	Nine months ended September 30, 2023	Nine months ended September 30, 2022
Net cash provided (used) by operating activities	\$ (3,216)	\$ 15,195
Less: Capital expenditures	(2,436)	(4,214)
Free cash flow	\$ (5,652)	\$ 10,981