

# TITAN MINING CORPORATION MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE THREE AND NINE MONTHS ENDED September 30, 2020

#### **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 unaudited consolidated financial statements for the three and nine months ended September 30, 2020, prepared in accordance with International Financial Reporting Standards ("IFRS").

Readers should be aware that: this MD&A contains "forward-looking statements" and "forward-looking information" (collectively, "forward-looking information") that are subject to risk factors set out in a cautionary note contained in our MD&A; and the technical and scientific information in this MD&A has been approved by a Qualified Person based on a variety of assumptions and estimates. For a discussion on each of these matters, refer to the "Notes to Reader" section of this MD&A.

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 prepared as of November 16, 2020. 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 Mining Corporation 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 and trade under the symbol "TI".

The Company's principal asset is a group of 100%-owned, high-grade zinc mines, the Empire State Mine ("ESM"), located in the Balmat–Edwards mining district in northern New York State, near Gouverneur and 35 miles south of the Port of Ogdensburg. These past-producing operations (the Empire State Mine's #2, #3, #4, Hyatt, Pierrepont and Edwards mines) were acquired on December 30, 2016, and had been on care and maintenance since 2008. Following the completion of Titan's initial public offering ("IPO") on October 19, 2017, the mine entered the development stage. Titan also continues to maintain its unpatented mining claims in New Mexico, USA and entered into an option agreement on the Mineral Ridge Property in Nevada, USA. The property is a fully permitted mine and mill operation comprised of approximately 14,000 acres of patented, fee-owned, and unpatented mining claims which include certain water rights.

#### FINANCIAL AND OPERATIONAL SUMMARY

		Three months ended September 30,						Nine months ended September 30,			
Financial Performance	2020		2019	C	hange		2020		2019	(	Change
Loss for the period	\$ 1,458	\$	1,597	\$	(139)	\$	12,775	\$	8,096	\$	4,679
Operating cash outflow (inflow) before changes in non-cash working capital	\$ (1,434)	\$	556	\$	(1,990)	\$	1,878	\$	3,305	\$	1,427

Financial Condition	September 30, 2020	December 31, 2019
Cash and cash equivalents	\$ 7,018	\$ 1,709
Working capital (negative)	\$(27,522)	\$ (21,225)
Total assets	\$ 78,625	\$ 78,500
Equity	\$ 19,535	\$ 25,190

		Three mont	ths ended ember 30,	Nine months ended September 30,				
Operating Data	2020	2019	Change	2020	2019	Change		
Payable zinc produced (mlbs)	11.0	8.5	2.5	32.3	21.3	11.0		
Payable zinc sold (mlbs)	11.2	8.3	2.9	33.3	22.3	11.0		
Average provisional zinc price (per lb)	\$ 1.06	\$ 1.06	\$ -	\$ 0.97	\$ 1.16	\$ (0.19)		

#### **HIGHLIGHTS**

Significant events and operating highlights for the third quarter 2020 and up to the date of this MD&A include the following:

- ESM worked 73 Lost Time Injury (LTI) free days until September 3, 2020. ESM worked 27 LTI free days (20,588 hours) in the quarter following the incident.
- The Company generated operating cash inflow before changes in non-cash working capital of \$1,434

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(In thousands of US Dollars, unless otherwise indicated)

- Tons milled increased 10% compared to the prior quarter as the mine continues to ramp up production.
- Milled grade was lower than the prior quarter due to lower grades in select headings in New Fold and Mud Pond Main.
- Precautionary adjustments to employee schedules and work locations relating to the COVID-19 pandemic made during the first quarter of 2020 continued throughout the third quarter of 2020.
- Development of the #2D zone was suspended in the first quarter of 2020 as a result of lower zinc prices in favour of higher-grade opportunities elsewhere in the mine. Production blasting of the first longhole stope in this zone was completed in the third quarter of 2020.
- The upper level of the New Fold zone proved to be longer in strike length and higher in grade than expected leading to additional ore development. The first longhole stope from this zone was blasted in the third quarter of 2020 and extraction will continue into the fourth quarter of 2020. Two levels are fully developed in this zone with a third currently in development. A fourth level will be in development by the end of the year.
- On August 31, 2020, the Company announced the signing of an Option Agreement on the Mineral Ridge Property located in Esmeralda County, Nevada from Scorpio Gold Corporation.
- On September 24, 2020, the Company closed a non-brokered private placement financing raising gross proceeds of C\$8,003,800 million.

#### **OPERATIONS REVIEW**

			2020		2019						
		Q3	Q2	Q1	<b>FY</b> <sup>(1)</sup>	Q4	Q3	Q2	Q1		
Production											
Ore mined	tons	87,422	77,164	71,841	218,875	63,738	62,672	46,163	46,302		
Ore milled	tons	87,657	79,409	70,076	218,823	63,253	63,387	46,518	45,665		
Feed grade	zn %	7.7	8.7	8.8	8.3	8.1	8.2	8.4	8.6		
Recovery	%	96.5	96.6	96.7	96.4	96.7	96.2	96.5	96.2		
Payable zinc (2)	mlbs	11.2	11.4	10.2	29.7	8.4	8.5	6.4	6.4		
Concentrate grade	zn %	58.9	59.8	59.6	58.7	58.3	59.2	58.0	59.4		
Zinc concentrate											
produced	tons	11,045	11,162	10,051	29,808	8,514	8,454	6,478	6,362		
Sales											
Payable zinc	mlbs	11.2	11.7	10.4	30.1	7.8	8.3	6.7	7.3		
Average											
provisional zinc	+ m	*	+ 000	+ 004		+ 4 00	* 400	+	+ 400		
price	\$/lb	\$ 1.06	\$ 0.89	\$ 0.96	\$ 1.15	\$ 1.08	\$ 1.06	\$ 1.26	\$ 1.22		
C1 cash cost per	<b>ታ /</b> ሀ-	¢ 0.02	<b>ተ ሰ</b> ሰን	¢ ሰብ	¢.	φ	ф	¢.	¢.		
payable zinc pound sold <sup>(2)</sup>	\$/lb	\$ 0.93	\$ 0.92	\$ 0.95	\$ -	\$ -	\$ -	\$ -	\$ -		

The full-year figure may not equal the sum of the quarters due to rounding.

ESM continues to operate underground on a 5 day per week, two shift per day basis while surface operations continue on a 5 day per week, one shift per day basis following the February 2019 workforce reduction.

In March 2020, New York State Governor Cuomo issued Executive Orders requiring on site business premises workforce reductions followed by business closures for non-essential businesses. Although restrictions in New York State have been relaxed through various reopening phases, ESM continues to reduce employee exposure to COVID-19 through social distancing, thermal scanning of all employees and visitors, cancellation of travel, limiting non-essential visitors and vendors, administrative staff working from home, limiting the number of personnel in meetings and shaft cages and modified work schedules to reduce the number of personnel on site

<sup>(2)</sup> C1 cash cost per payable pound sold is a non-GAAP measure-see page 19 of this MD&A for discussion of non-IFRS measures.

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at a time. To date there have been no positive COVID-19 cases amongst the workforce and production has not been negatively impacted.

Work on capital projects including engineering for the life of mine update and potential open pit projects that were suspended during the COVID-19 related zinc price downturn restarted during the third quarter of 2020. Additionally, ESM committed to purchase two refurbished 6 yd loaders to increase production and development rates. The mine will take delivery early in the fourth quarter of 2020.

The operation continues to identify incremental efficiency improvements which have resulted in an increase in production to an average of 1,328 tons milled per operating day during the third quarter of 2020, a 9.6% increase over the previous quarter.

Mining efforts are focused on the higher-grade New Fold, Mud Pond, and Mud Pond Apron zones. While lower than expected grades were encountered in New Fold and Mud Pond during the quarter, grades in those zones recovered to previous levels and are expected to maintain in the fourth quarter. Mining restarted in the Upper Mahler zone to recover high grade remnants and development of the Lower Mahler zone commenced in the third quarter of 2020. ESM is also continuing to develop to lower levels of New Fold to support future production. The first production stope in the New Fold zone was blasted on schedule in the quarter.

The Company's Vice President of Operations, Kevin Torpy resigned effective October 23, 2020 for personal reasons. Titan does not plan on replacing the vacancy left by Mr. Torpy's departure.

#### **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 #2D zone and three zones of near-surface mineralization (Hoist House, Turnpike and Pumphouse). All three zones are located on ESM surface and mineral tenure and are located one mile south of the ESM #4 milling and mining complex.

The exploration team has continued to generate additional district targets using historic soil, stream sediment and geophysical data and as well as looking for additional near-surface mineralization in the vicinity of the other historic mining areas (Hyatt, Pierrepont and Edwards). These areas are being prioritized for drill testing as resources become available. Field reconnaissance planned for the third quarter of 2020 has been deferred to the fourth quarter as the team continues to refine target areas and consolidate mineral rights interest for each of the district target areas.

#### 2020 Drill Programs

#### Underground:

Drill programs in the third quarter of 2020 focused on advancing definition drilling in Lower Mahler utilizing Company owned underground drills and labour. Drilling continues to delineate high-grade zinc mineralization over a down-plunge strike length of 850 feet. The results from the current and pending drill programs will be utilized to refine the current mine plan, in preparation for development in the fourth quarter of 2020. A total of 28 holes totaling 6,962 feet were completed in the third quarter and an additional 25 holes are planned for the fourth quarter of 2020. Production blasting in #2D was completed in the third quarter and mucking of mineralized material will continue into the fourth quarter. Exploration drilling on underground targets remains on hold and will continue when resources become available.

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#### Surface:

The Company re-started its surface exploration program in the third quarter with a focus to discover a new mineralized trend north-west of the Mud Pond mineralized zone located at ESM's #4 Mine. The high priority Farm to Market target has the potential to a host high-grade, large tonnage deposit and has not been drill tested. The first hole was collared at the end of the third quarter and 300 feet were drilled. Drilling is expected to continue throughout the fourth quarter of 2020 and into 2021. Evaluation of high priority regional targets will continue during the fourth quarter with a focus on field reconnaissance.

#### **Mineral Ridge**

The Company announced the signing of an Option Agreement on the Mineral Ridge Property ("Mineral Ridge") located in Esmeralda County, Nevada from Scorpio Gold Corporation in the third quarter. Mineral Ridge is a fully permitted mine and mill operation comprised of approximately 14,000 acres of patented, fee-owned, and unpatented mining claims which include certain water rights. Historically, Mineral Ridge has produced approximately 1 million ounces of gold from underground and open pit mining operations and contains a robust mineralized system that has, to date, been under-explored. In the third quarter, the Company designed a plan to target and expand resource areas around the Brodie, Oromonte, Custer and Bunkhouse pit areas. Additionally, the Company will thoroughly test the State Bank, Chieftain and Tarantula district targets which have been prioritized based on their geologic setting and anomalous gold outcrop samples. The Company will commence drilling in the fourth quarter of 2020 with one diamond drill and plans to add a second reverse circulation drill later in the fourth quarter of 2020.

#### **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 during the first three quarters of 2020 on the property.

TREND ANALYSIS Summary of Quarterly Results

		2020			2019							
	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4				
_												
Revenues	9,135	6,396	5,780	(526)	454	(1,652)	2,797	(344)				
Net loss	1,458	2,952	8,365	2,790	1,597	5,411	1,089	4,871				
Basic & diluted loss per												
share	0.01	0.02	0.07	0.02	0.02	0.05	0.01	0.05				
Cash and cash equivalents	7,018	380	536	1,709	3,822	552	2,393	2,290				
Total assets	78,625	74,056	76,787	78,500	81,034	76,804	82,829	73,201				
Total liabilities	59,090	58,554	57,014	53,310	53,717	51,835	54,240	45,962				

Note: The sum of the quarters in the table above may not equal the full-year amounts disclosed elsewhere in this document due to rounding.

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

Following the IPO in the fourth quarter of 2017, the Company started refurbishment of the mine and plant infrastructure in preparation for the start of operations. Accordingly, all mine site costs, including general and administration, but excluding exploration and evaluation costs, were capitalized to mineral properties, plant and equipment as construction-in-progress.

#### Management's Discussion and Analysis

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During the second quarter of 2018, the Company completed the refurbishment activities. However, the Company had not yet declared commercial production as ESM has been unable to sustain production at rates that management intended. Therefore, the Company continued to capitalize mine site costs, excluding exploration and evaluation expenses, to mineral properties, plant and equipment and total assets continued to increase in value during the third quarters of 2018 through to the first quarter of 2019 and throughout 2019. Furthermore, the adoption of the new accounting standard for leases effective January 1, 2019 contributed to the increase in total assets, and liabilities in the first quarter of 2019.

Total assets decreased in the second quarter of 2019 mainly due to a reduction in cash, trade and other receivables and inventories. During the third quarter of 2019, total assets increased as a result of an increase in cash received from subscriptions from the private placement that closed in October 2019, as well as increases in trade and other receivables and inventories. The total assets decreased in the fourth quarter of 2019 mainly due to a reduction in cash, trade and other receivables.

Total assets increased in the first three quarters of 2020 mainly due to an increase of cash and trade and other receivables, net of a reduction in inventories, other current assets, and net ending value of mineral properties, plant and equipment and right-of-use assets.

The increase in net losses subsequent to the first quarter of 2018 was due to the impact of the negative mark-to-market revaluation of pre-commercial sales, as well as the increase in drilling activities during those quarters. The decrease in net loss in the first quarter of 2019 was due to \$2,797 of upward provisional pricing adjustments as zinc price trended up during the quarter. The increase in net losses in the second quarter of 2019 was mainly due to the impact of the negative mark-to-market revaluation of pre-commercial sales, as well as increased interest and finance expenses associated with the Company's credit facilities and a \$1,702 loss on loan extinguishment as a result of the loan amendment. The decrease in net losses in the third quarter of 2019 was mainly due to the impact of the mark-to-market revaluation of pre-commercial sales and decreased administrative expenses. During the fourth quarter of 2019, the net loss increased mainly due to increased interest on debt and the related party loan as well as the impact of negative mark-to-market revaluations.

The decrease in net losses during the first three quarters of 2020 was as a result of the Company recognizing revenues from zinc concentrate sales and operating expenses in the Consolidated Statement of Loss and Other Comprehensive Loss. Effective January 1, 2020, the Company determined that the infrastructure at Empire State Mines was operating as intended. As such, revenues generated from zinc concentrate sales during the nine months ended September 30, 2020 are no longer being capitalized to mineral property, plant and equipment as in prior periods and are being recognized in the Company's Consolidated Statement of Loss and Other Comprehensive Loss. Additionally, the Company began depreciating and amortizing assets that were re-classed from Construction in progress and expensing them to cost of goods sold over their estimated useful lives during the first three quarters of 2020. Management regards the assets at ESM to be operating as mechanically intended but views the output of the mine to still be in the ramp up phase for the nine months ended September 30, 2020.

Cash and cash equivalents continued to decline in the second and third quarter of 2018 due to the ongoing precommercial production and exploration activities at ESM. Cash and cash equivalents and total liabilities increased in the fourth quarter of 2018 as a result of financing received from a related party.

Cash and cash equivalents increased slightly in the first quarter of 2019 due to additional funding received by the Company which offset the operating and exploration expenditures at ESM. Cash and cash equivalents decreased significantly in the second quarter of 2019 due to less funding received by the Company during the quarter compared to the prior quarter and a reduction in accounts payable.

Cash and cash equivalents increased in the third quarter of 2019 as a result of the receipt of subscriptions related to a private placement, of which \$3,685 (Cdn \$4,880) was received in September 2019 and the remaining \$1,053 (Cdn \$1,420) was received in October 2019. The private placement closed on October 10, 2019 with proceeds used to fund operations in the fourth quarter of 2019.

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Cash and cash equivalents increased in the first three quarters of 2020. Although less financing was received by the Company during the period, the Company spent less cash operating activities as production and zinc prices improved and invested less in capital assets, compared to the same period in 2019.

#### FINANCIAL REVIEW

#### **Financial Results**

(\$000's)	Three months ended September 30	Nine months ended September 30
Net loss for the 2019 period Increase (decrease) in components of loss:	\$ 1,597	\$ 8,096
Revenues	(8,681)	(19,712)
Cost of sales	9,339	27,611
Other operating expenses	(18)	(2,270)
Other expenses and income	(779)	(950)
Net loss for the 2020 period	\$ 1,458	\$ 12,775

During the first three quarters of 2020, the Company began recognizing sales of zinc concentrate in the Consolidated Statement of Loss and Other Comprehensive Loss. Revenues increased compared to the prior quarters as a result. In addition, the Company recorded a negative \$258 provisional pricing adjustment on its revenue as a result of downward zinc concentrate price compared to a positive provisional pricing adjustment of \$1,600 in the same period of 2019.

Operating expenses and depreciation and depletion expenses were increased during the first three quarters of 2020 compared to the prior-year period due to recognition of operating related expenses and depreciation expenses as cost of sales in Consolidated Statement of Loss and Other Comprehensive Loss other than capitalizing to mineral property, plant and equipment as in prior periods on Consolidated Statements of Financial Position.

During the first three quarters of 2020, other expenses/(income) were increased compared to the same period in prior year primarily due to decreases of exploration and evaluation expenses and general and administration expenses.

#### Revenue

-		T	Nine months ended September 30,				
(\$000's)	2020		2019	Change	2020	2019	Change
Zinc concentrate sales	\$ 11,869	\$	-	\$ 11,869	\$ 32,297	\$ -	\$ 32,297
Zinc concentrate provisional							
pricing adjustments	947		454	493	(258)	1,600	(1,858)
Smelting and refining charges	(3,681)		-	(3,681)	(10,728)	-	(10,728)
Revenue, net	\$ 9,135	\$	454	\$ 8,681	\$ 21,311	\$ 1,600	\$ 19,711

Revenues for the three months ended September 30, 2020 include sales of 11.2 million payable pounds of zinc (Q3 2019 – 8.3 million) at an average realized price per pound of \$1.06 (Q3 2019 – \$1.06). For the nine months ended September 30, 2020, revenues include sales of 33.3 million payable pounds of zinc (Q3 2019 – 22.3 million) at an average realized price per pound of \$0.97 (Q3 2019 – \$1.16). Effective January 1, 2020 revenues generated from zinc concentrate sales during the nine months ended September 30, 2020 are no longer being

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capitalized to mineral property, plant and equipment as in prior periods and are being recognized in the Company's Consolidated Statement of Loss and Other Comprehensive Loss.

#### Cost of sales

		Th	Nine months ended September 30,					
(\$000's)	2020		2019	Change	2020	2	019	Change
Operating expenses	\$ 6,361	\$	-	\$ 6,361	\$ 18,863	\$	-	\$ 18,863
Transportation costs	290		-	290	1,147		-	1,147
Royalties	6		-	6	22		-	22
Depreciation and depletion	2,566		-	2,566	7,202		-	7,202
Change of Inventory	116		-	116	377		-	377
Total	\$ 9,339	\$	-	\$ 9,339	\$ 27,611	\$	-	\$ 27,611

Effective January 1, 2020 costs incurred to produce zinc concentrate during the nine months ended September 30, 2020 are no longer being capitalized to mineral property, plant and equipment as in prior periods and are being recognized in the Company's Consolidated Statement of Loss and Other Comprehensive Loss.

#### Other operating expenses

	Three	mon	ths end	ed S	Septem	ber 30,	Nine months ended September 30,				
	2020		2019	Cl	hange	%	2020		2019	Change	%
G&A expenses:											
Salaries and benefits	\$ 392	\$	535	\$	(143)	(27)	\$ 1,155	\$	1,376	\$ (221)	(16)
Share-based compensation	214		175		39	22	424		664	(240)	(36)
Professional fees	238		135		103	76	389		669	(280)	(42)
Office and administration	98		108		(10)	(9)	357		471	(114)	(24)
Investor relations	18		10		8	80	55		69	(14)	(20)
	\$ 960	\$	963	\$	(3)	-	\$ 2,380	\$	3,249	\$ (869)	(27)
<b>Exploration and evaluation</b>											
("E&E") expenses:											
Salaries and benefits	\$ 139	\$	141	\$	(2)	(1)	\$ 470	5	535	\$ (65)	(12)
Assay and analyses	-		8		(8)	(100)	96		115	(19)	(17)
Contractors and consultants	30		101		(71)	(70)	408		1,746	(1,338)	(77)
Other	76		11		65	591	144		123	21	17
	\$ 245	\$	261	\$	(16)	(6)	\$ 1,118	\$	2,519	\$ (1,401)	(56)

G&A expenses for the first three quarters ended September 30, 2020 have decreased by 27% compared to the same period ended September 30, 2019. The decrease in salaries and benefits is due to a reduction in the personnel working at the corporate office. The decrease in professional fees, office and administration, and investor relations expenses is due to less management costs and fewer corporate activities.

E&E expenses for the first three quarters ended September 30, 2020 have decreased by 56% compared to the same period in 2019. The decrease is primarily due to fewer exploration activities in 2020 and use of Company owned drills rather than drilling contractors.

#### Other expenses (income)

Three months ended						Nine months ended						
			Septen	nber 30,			Septemb	er 30,				
20	020	2	019	Change	%	2020	2019	Change	%			
\$	49	\$	827	\$(778)	(95)	\$ 2,977	\$ 3,928	\$ (951)	(24)			

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Other expenses for the first three quarters of 2020 decreased 24% compared to the same period of 2019. The decrease was primarily due to an increase of foreign exchange loss of \$788, which was generated by the revaluation of debt for the quarter ended September 30, 2020.

#### 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 "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 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 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 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 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.

The Available Credit was fully drawn at September 30, 2020.

#### 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 matures on November 30, 2020, but is subject to mandatory prepayment if the Company closes one or more 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

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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 12, 2020, following shareholder approval by written consent, the Company repriced 2.5 million warrants from C\$1.40 to C\$0.75 (the "Warrant Amendment") issued to Augusta Investments Inc. (the "Lender"), a company controlled by the Company's Executive Chairman, expiring on January 20, 2024 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 US\$20.71 million (the "Facility"). In consideration for the repricing, the Lender agreed to extend the due date for repayment of the Facility by one additional year from November 30, 2020 to November 30, 2021.

#### Paycheck Protection Program Loan

On April 21, 2020, the Company's wholly owned subsidiary Empire State Mines, LLC applied for and received a loan totaling \$2,409 under the U.S. Small Business Administration Paycheck Protection Program. Proceeds from this program have been used to assist U.S. small businesses during the COVID-19 pandemic in an effort to keep employees on the payroll and to contribute to utilities, rent and mortgage costs. The loan has a maturity of two years and an interest rate of 1%. The loan will be fully forgiven if the funds are used for payroll and utilities costs if at least 60% of the forgiven amount is used for payroll and full time equivalent employees remain on payroll during the eight week period following the receipt of the funds. Loan payments will also be deferred for six months. No collateral or personal guarantees are required. Due to changes in the program, the original agreement was amended September 16, 2020 such that if loan forgiveness is applied for within ten months of the loan forgiveness period, no principal or interest payments are required while the loan forgiveness application is being reviewed. As at September 30, 2020, the carrying value of the loan was \$2,409.

#### **Financial Condition**

	September	30, 2020	December 31, 2019			
Cash and cash equivalents	\$	7,018	\$	1,709		
Total debt	\$	36,704	\$	31,295		
Net debt (cash)	\$	29,686	\$	29,586		
Working capital (negative)	\$	(27,522)	\$	(21,225)		

Cash and cash equivalents as at September 30, 2020 increased by \$5,309 compared to December 31, 2019. During the first quarter of 2020, the Company received \$1,000 of funding from the Augusta credit facilities, \$2,409 from the U.S. Paycheck Protection Program in the second quarter, and \$5,988 from the private placement in the third quarter of 2020. Cash outflows during the nine months ended September 30, 2020 related to operating activities was \$2,881, and cash inflow related to financing activities was \$8,649.

Operations at ESM were restructured in the first quarter of 2019 and since such time have continued to ramp up but as at September 30, 2020 have not reached operating levels intended by Management. The Company

#### Management's Discussion and Analysis

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continues to invest in mine development and plant and equipment at ESM during the ramp up in addition to allocating resources to a significant exploration program when resources permit.

At September 30, 2020, the Company's debt comprised a loan from a related party of \$20,710, the Credit Facility of \$10,000, the PPP loan of \$2,049, and equipment loans of \$161. The Company has accrued interest of \$1,440 related to the related party loan, \$31 related to the Credit Facility, and \$11 related to the PPP loan for the first three guarters of 2020.

Working capital decreased for the quarter ended September 30, 2020 compared to December 31, 2019. The decrease was primarily as a result of the Company's Bank of Nova Scotia loan being classified as current, the decrease in inventory and other current assets. These factors offset the decrease in accounts payable and accrued liabilities, lease liabilities and an increase of Loan from related party.

#### **Cash Flows**

	Nine months ended September 30,							
	2020	2019	Change					
Operating cash flows before changes in working capital	\$ (1,878)	\$ (3,305)	\$ 1,427					
Changes in working capital	(1,003)	(87)	(916)					
Net cash flows used in operating activities	(2,881)	(3,392)	511					
Net cash flows used in investing activities	(361)	(7,563)	7,202					
Net cash flows provided (used) by financing activities	8,649	12,521	(3,872)					
	\$5,407	\$ 1,566	\$ 3,841					

Net cash flows used in operations reflect the cash components of the E&E, G&A and finance expenses.

Cash flows from financing activities during the period ended September 30, 2020 reflect the \$1,000 drawn on the loan from related party, \$2,409 received from U.S. Paycheck Protection Program, and \$5,988 received from the private placement, net of \$355 associated interest payments, \$261 of payments made on lease liabilities and \$132 of repayment of equipment loans. The quarter ended September 30, 2019, reflects the amounts drawn the loan from related party, net of associated transaction costs and interest payments, and payments made on lease liabilities.

#### **Capital Expenditures**

As a result of the Company no longer capitalizing revenues from zinc concentrate sales and operating costs effective January 1, 2020, cash flows used in investing activities during the period ended September 30, 2020 are lower that the same period in 2019.

#### Liquidity

As at September 30, 2020, the Company had total liquidity of \$7,018 in cash and cash equivalents. The Company had negative working capital of \$27,522 and a deficit of \$49,264. For the nine months ended September 30, 2020, the Company had negative operating cash flows before changes in working capital of \$1,878 and a net loss of \$12,775.

As at December 31, 2019, the Company had total liquidity of \$1,709 in cash and cash equivalents. The Company had negative working capital of \$21,225 and a deficit of \$36,489. For the year ended December 31, 2019, the Company had negative operating cash flows before changes in working capital of \$5,136 and a net loss of \$10,886.

As the ramp-up of mining activities continues into 2020, Company will require additional funding in the next twelve months. The Company has historically raised funds principally through the sale of securities and most recently, through the credit arrangement and advances from a related party. The Company expects that it will

#### Management's Discussion and Analysis

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continue to obtain funding through similar or other means depending on market conditions and other relevant factors at the time. However, there can be no assurance that the Company will be able to obtain such additional funding or obtain it on acceptable terms. This material uncertainty casts significant doubt about the Company's ability to continue as a going concern.

#### **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 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 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 alliances. Management reviews its capital management approach on a regular basis. The Company is not subject to any externally imposed capital requirements.

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

The Company's contractual obligations and commitments as at September 30, 2020 and their approximate timing of payment are as follows:

	<1 year	1 – 3 years		4 – 5		>5 years		Total	
					years				
Debt:									
Repayment of principal	\$ 32,316	\$	803	\$	-	\$	-	\$ 33,119	
Repayment of interest	3,424		-		-		-	3,424	
Leases	153		34		-		-	187	
Capital Expenditure	139		22		-		-	161	
Reclamation and remediation provision	-		-		-		19,646	19,646	
	\$ 36,032	9	859	\$	-	\$	17,636	\$ 56,537	

#### **Outstanding Securities**

As of the date of this MD&A, the Company had 138,978,357 common shares issued, and 22,503,798 warrants and 8,485,000 options outstanding.

#### RELATED PARTY TRANSACTIONS

#### **Related Party Loan**

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 matures on November 30, 2020, but is subject to mandatory prepayment if the Company closes one or more 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.

#### Management's Discussion and Analysis

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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. A summary of the carrying value was as follows:

	Interest and borrowing									
		Principal		costs		Total				
Balance, January 31, 2019		15,695		(886)		14,809				
Proceeds received		4,015		-		4,015				
Accrued Interest		-		1,807		1,807				
Amortization of borrowing costs		-		462		462				
Balance, December 31, 2019	\$	19,710	\$	1,383	\$	21,093				
Proceeds received		1,000		-		1,000				
Accrued interest		-		1,440		1,440				
Amortization of borrowing costs		-		562		562				
Balance, September 30, 2020	\$	20,710	\$	3,385	\$	24,095				

	September 30,	Dec	ember 31
	2020		2019
Current	\$ 24,095	\$	21,093
	\$ 24,095	\$	21,093

On October 12, 2020, following shareholder approval by written consent, the Company repriced 2.5 million warrants from C\$1.40 to C\$0.75 (the "Warrant Amendment") issued to Augusta Investments Inc. (the "Lender"), a company controlled by the Company's Executive Chairman, expiring on January 20, 2024 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 US\$20.71 million (the "Facility"). In consideration for the repricing, the Lender agreed to extend the due date for repayment of the Facility by one additional year from November 30, 2020 to November 30, 2021.

#### **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, Chief Executive Officer, President, Chief Financial Officer, Chief Operating Officer and Directors.

#### Management's Discussion and Analysis

(In thousands of US Dollars, unless otherwise indicated)

	Th		nonths end September 3	_	ns ended nber 30,			
	2020	2020 2019				2020		
Salaries and benefits	\$ 276	\$	323	\$	859	\$	809	
Share-based compensation	201		240		379		794	
Directors' fees	43		49		135		148	
	\$ 520	\$	612	\$	1,373	\$	1,751	

	September 30,	December 31,
	2020	2019
Salaries and benefits payable	\$ 356	\$ 194
Director fees payable	135	-
Termination benefits payable - current	117	196
Termination benefits payable - non-current	193	192
	\$ 801	\$ 582

#### 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
- Capitalization of costs
- Reclamation and remediation provision;
- Impairment;
- Fair value measurement
- Determination of useful life of assets for depreciation purposes;
- Share-based compensation;
- Taxation; and
- Determination of commercial production

See note 3 of our 2019 annual audited consolidated financial statements for a detailed discussion of these accounting estimates and judgments.

#### Management's Discussion and Analysis

(In thousands of US Dollars, unless otherwise indicated)

## 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.

#### 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 nine months ended September 30, 2020.

#### NOTES TO READER

#### Cautionary note regarding forward-looking information

This MD&A contains forward-looking information within the meaning of applicable Canadian securities legislation. All information contained in this MD&A, other than statements of current and historical fact, is forward-looking information. 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. All of the forward-looking information in this MD&A is qualified by this cautionary note.

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. 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; employee relations and shortages of skilled personnel and contractors; and the speculative nature of, and the risks involved in, the exploration, development and mining business.

#### Management's Discussion and Analysis

(In thousands of US Dollars, unless otherwise indicated)

The material factors or assumptions that we identified and were applied by us in drawing conclusions or making forecasts or projections set out in the forward-looking information include, but are not limited to:

- achieving the targeted completion date for a revised mine plan in 2020;
- the success of changes implemented at ESM to address the potential shortfall of producing stopes and faces:
- the expectation of lower costs, and improved cash flow and productivity at ESM;
- the expectation of efficiencies associated with a reduced workforce;
- the expectation that any new mineral resources defined at the #2D zone have the potential to be developed with a relatively low capital expenditure and short timeline, and to increase production above the current mine plan, while lowering unit operating costs;
- the Company's plans to maintain its current land position in New Mexico while evaluating future exploration activities;
- the expectation the Company will continue to obtain financing through the sale of securities, credit arrangements, and similar or other means;
- the execution of our business and growth strategies, including the success of our strategic investments and initiatives;
- no significant unanticipated challenges with stakeholders at our various projects;
- no significant unanticipated events or changes relating to regulatory, environmental, health and safety matters:
- the timing and possible outcome of pending litigation and no significant unanticipated litigation; and
- no significant and continuing adverse changes in general economic conditions or conditions in the financial markets (including commodity prices and foreign exchange rates).

#### **Global Outbreaks and Coronavirus**

The Company's business could be significantly adversely affected by the effects of any widespread global outbreak of contagious disease. A significant outbreak of contagious diseases in the human population could result in a widespread health crisis that could adversely affect the economies and financial markets of many countries, resulting in an economic downtown that could affect demand for the Company's products and likely impact operating results. In particular, the recent outbreak of the novel coronavirus ("COVID-19") has had a negative impact on the Company's business and global financial conditions. The Company cannot accurately predict the impact COVID-19 will have on the Company to obtain financing or third parties' ability to meet their obligations with the Company, including due to uncertainties relating to the ultimate geographic spread of the virus, the severity of the disease, the duration of the outbreak, and the length of travel and quarantine restrictions imposed by governments of affected countries. In the event that the prevalence of the coronavirus continues to increase (or fears in respect of the coronavirus continue to increase), governments may increase regulations and restrictions regarding the flow of labour or products, and travel bans, and the Company's operations, suppliers, customers and distribution channels, and ability to advance its projects, could be adversely affected. In particular, should any employees or consultants of the Company become infected with COVID-19 or similar pathogens, it could have a material negative impact on the Company's operations and prospects.

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 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.

#### Management's Discussion and Analysis

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#### **Qualified Person**

The technical and scientific information in this MD&A has been reviewed and approved by Donald R. Taylor, MSc., PG, 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 a description of the key assumptions, parameters and methods used to estimate mineral reserves and resources, as well as data verification procedures and a general discussion of the extent to which the estimates of scientific and technical information may be affected by any known environmental, permitting, legal title, taxation, sociopolitical, marketing or other relevant factors, please see the Technical Reports filed by us on SEDAR at www.sedar.com.

#### 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 differ from those used by, and may not be comparable to such measures as 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 Empire State Mines is performing and to assist in the assessment of the overall efficiency and effectiveness of the mine site management team. The table below provides 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 per payable pound sold is a non-GAAP measure and represents the cash cost incurred at each processing stage, from mining through to recoverable metal delivered to customers, depreciation and depletion is excluded from the calculation of C1 cash cost per payable pound sold. The costs included in this definition comprise 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 costs by payable pounds of metal sold.

		Nine mo	nths end	ed Se	pten	nber	30,					
	2020			2019			2020		2019			
		Per				Per		Per			Per	
C1 cash cost per payable pound	Total	pound	To	otal	poı	ınd	Total	pound	To	tal	pour	nd
Pounds of payable zinc sold												
(millions)		11.2						33.3				
Operating expenses and selling												
costs	\$6,773	\$0.61	\$	-	\$	-	\$20,409	\$0.61	\$	-	\$	-
Concentrate smelting and refining												
costs	3,681	0.33		-		-	10,728	0.32		-		-
Total C1 cash cost	\$10,454	\$0.93	\$	-	\$	-	\$31,137	\$0.94	\$	-	\$	-