



**TITAN MINING CORPORATION  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
FOR THE YEAR ENDED DECEMBER 31, 2018**

## **TITAN MINING CORPORATION**

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

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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, 2018, 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 [www.titanminingcorp.com](http://www.titanminingcorp.com) and under the Company's profile on the SEDAR website at [www.sedar.com](http://www.sedar.com).

This MD&A is prepared as of March 21, 2019. All dollar amounts reported herein are in US dollars unless otherwise indicated.

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#### **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 located 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 has a base metals exploration program on its unpatented mining claims in New Mexico, USA.

#### **STRATEGY AND OUTLOOK**

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

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

The past year has been a challenging one for the Company, with a number of operational issues delaying commercial production at ESM. The mine has not yet achieved targeted throughput levels on a sustained basis and this has put a strain on our financial resources. In response to these challenges, we are restructuring the ESM operations. The changes being implemented will address the shortfall of producing stopes and faces, with the goal of lowering our costs, optimizing cash flow and productivity, and better positioning the mine for future success. The workforce will be reduced but we expect to benefit from greater efficiencies associated with a smaller group of miners focused on production and development. The objective is to achieve balanced mine development while our exploration group continues its program targeting large, high-grade deposits in the district. A revised mine plan, incorporating the #2D zone and the higher-grade New Fold zone in the #4 mine, is expected to be completed in mid-2019. In addition, the Company continues to examine various financing options to bolster the Company's treasury.

We remain confident in the potential of this prolific district and continue to invest in both exploration and development at ESM.

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#### FINANCIAL AND OPERATIONAL SUMMARY

Financial Performance	Three months ended December 31,			Year ended December 31,		
	2018	2017	Change	2018	2017	Change
Loss for the period	\$4,870	\$2,527	\$2,343	\$15,857	\$11,031	\$4,826
Operating cash flow before changes in non-cash working capital	(\$4,009)	(\$2,028)	(\$1,981)	(\$13,444)	(\$7,911)	(\$5,533)

Financial Condition	December 31, 2018	December 31, 2017
Cash and cash equivalents	\$2,290	\$25,168
Working capital (negative)	(\$7,653)	\$21,228
Total assets	\$73,201	\$60,835
Equity	\$27,239	\$41,481

Operating Data	Three months ended December 31,			Year ended December 31,		
	2018	2017	Change	2018	2017	Change
Payable zinc produced (million lbs) <sup>(1)</sup>	4.9	-	n/a	23.9	-	n/a
Payable zinc sold (million lbs)	4.3	-	n/a	22.6	-	n/a
Average provisional zinc price (per lb)	\$1.19	-	n/a	\$1.26	-	n/a

<sup>(1)</sup> The full-year figure includes in-circuit zinc inventory of 0.5 million pounds ("mlbs") as a result of filling the mill upon restart. This amount has been classified as Mineral property, plant and equipment.

#### HIGHLIGHTS

Significant events and operating highlights for the fourth quarter 2018 and up to the date of this MD&A include the following:

- The ESM operation is being restructured with a near-term focus on underground development as well as continued near-mine and district exploration. The workforce has been reduced, with a core team mining easily accessible ore at a reduced throughput.
- The Company continued its focus on the development of the #2D historic mineralized zone, which remains open at depth and laterally toward the #4 shaft. The fourth-quarter exploration program focused on down-plunge extension and infill drilling. To date, the #2D zone has been extended by over 1,380 feet down-plunge from the historic mineralization and results demonstrate the continuity of mineralization along strike and laterally in the zone.
- Preliminary engineering design is underway and an updated mine plan for ESM incorporating the #2D zone is expected to be completed in mid-2019.
- The Company established a \$18.7 million credit facility with a company controlled by Titan's Executive Chairman. As at the date of the MD&A, a total of \$17.6 million was drawn.
- The Company has amended certain terms of its credit facility with Bank of Nova Scotia whereby a maximum of \$10 million is available to the Company on a revolving basis. As at the date of the MD&A, the facility has been fully drawn.
- ESM was impacted by a number of operational issues including the October 2, 2018 contractor fatality. The fatality occurred at the underground operation involving an employee of Major Drilling, a contractor working at ESM.

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#### OPERATIONS REVIEW

		FY 2018 <sup>(1)</sup>	Q4	Q3	Q2	Q1
<b>Production</b>						
Ore mined	tons	188,788	48,673	57,544	64,976	17,595
Ore milled	tons	187,854	48,302	59,773	66,032	13,746
Feed grade	zn %	8.0	6.2	9.0	7.7	10.4
Recovery	%	94.3	96.1	96.1	92.7	81.7
Payable zinc <sup>(2)</sup>	mlbs	23.9	4.9	9.0	8.0	2.0
Concentrate grade	zn %	58.2	58.9	59.7	57.5	53.2
Zinc concentrate produced	tons	24,208	4,957	8,816	8,238	2,197
<b>Sales</b>						
Payable zinc	mlbs	22.6	4.3	9.4	8.8	0.1
Average provisional zinc price	\$/lb	\$1.26	\$1.19	\$1.16	\$1.40	\$1.49

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

<sup>(2)</sup> The full-year figure includes in-circuit zinc inventory of 0.5 million pounds ("mlbs") as a result of filling the mill upon restart. This amount has been classified as Mineral property, plant and equipment.

Production at ESM was impacted by a number of operational issues during 2018 which delayed commercial production. Equipment availability was lower than originally targeted and efforts to replace an aging equipment fleet proceeded slower than expected. In addition, we were unable to attract and retain sufficient skilled workers. Underperformance of the mining contractor also contributed to the lower development and production rates that were lower than anticipated. This prompted a decision to transition to owner-mining which was completed in October.

ESM operations were also negatively impacted by certain unplanned events:

- On July 27, 2018, a hoist incident occurred during routine transportation of 30 personnel underground. The braking system unexpectedly engaged causing the cage to stop abruptly; nine contractors sustained injuries ranging from sprains and strains to a fracture. Underground activities were suspended for six days during which it was determined that the cause of the incident was electrical in nature, and corrective action was taken. As a result of this incident, hoist speeds for personnel and equipment were reduced until upgrades to the hoist braking system could be made. This resulted in operational inefficiencies that lasted until the upgrades were completed on January 17, 2019. Since the upgrade, the hoisting system has run at normal capacity.
- On October 2, 2018, the Company reported the fatality of a contractor who was working underground at ESM. The mine suspended activities immediately, partially restarted on October 3 and resumed fully by mid November. An extensive accident investigation, involving both internal and external (Mine Safety and Health Administration) safety personnel and local government officials, was undertaken to understand this isolated incident. Measures were identified and implemented to prevent any reoccurrence.
- In recent months (December to February), ESM has experienced poor stope performance resulting in fewer tons and lower feed grade to the plant. Two stopes completely failed, one stope was suspended due to poor ground conditions, and production in one stope was reduced due to unexpected change in orientation. Lastly, the Company needed to replace or repair aging infrastructure at ESM, which affected hoisting availability. Notably, the degradation of the support steel at one of the crusher feeders required replacement and the construction of a bulkhead. During this time, the mine was limited to crushing and hoisting of ore only, resulting in operational inefficiencies related to waste rock handling. Repairs were completed in late January 2019.

As noted earlier, the Company decided to restructure the ESM operation with a near-term focus on underground development. The mine will lower throughput while focusing on stope and waste development. A revised mine plan, incorporating the #2D zone and the higher-grade New Fold zone in the #4 mine, is expected to be completed in mid-2019.

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During the ramp up at ESM, there was a focus on production and the operation has fallen behind on mine rehabilitation and development. Changes being implemented as part of the restructuring that will target the shortfall of producing stopes and faces, with the goal of lower costs and better positioning the mine for future success. The workforce has been reduced with the expectation of greater efficiencies associated with a smaller group of miners focused on production and development and exploration.

## **EXPLORATION UPDATE**

### **Empire State Mine**

#### *Historic Data*

Titan's exploration team continues to review and compile historical drill data that was collected over approximately 100 years by the previous operators of ESM. The review, compilation, digitizing and modelling of historic drill data has contributed to the exploration success at ESM, with several near-mine mineralized zones identified, including the #2D zone and the NE Streeter zone.

#### *2018 Drill Programs*

The 2018 underground delineation drilling program was designed to test the up-plunge extension of the mineralization at the NE Fowler zone and upgrade the 2018 PEA<sup>1</sup> resource classification from the inferred category to the indicated category. The program demonstrated that the mineralization continues up-plunge, thickens to the west and north, and remains open in both directions. This indicates that the main part of the mineralized zone may not yet be discovered. Seven holes have been planned, which total 13,400 feet and will further test the NE Fowler mineralization.

As noted in the Strategy and Outlook section, drilling priority has shifted to the recently identified near-mine mineralized zones – #2D, NE Streeter and #1D. All three zones are open down-plunge, with potential for expansion along strike. The number of drills testing these zones from surface was increased from one to three, and an underground drill was added to expedite the drill program. The primary focus for drilling was the down-plunge extension of the #2D zone which has high-grade, large-tonnage resource potential. During 2018 and to date, the #2D zone has been extended by over 1,380 feet down-plunge from the historic mineralization and results demonstrate the continuity of mineralization along strike and laterally in the zone. The #2D zone is characterized by mineable thicknesses of massive sphalerite and minor amounts of galena. A total of 15,000 feet were drilled at the NE Streeter and #1D zones during 2018.

#### *2019 Drill Programs*

Exploration drilling will test several district targets with one diamond drill. The district targets include historic mined areas such as the Edwards mine, and several prospects with soil and geophysical anomalies. All exploration targets have potential for high-grade, large-tonnage deposits.

Delineation drilling will target the up-plunge extension of the New Fold zone. A 20-hole program is planned, totaling approximately 10,000 feet of drilling. Infill drilling at the mine site has been taken over by ESM employees using ESM owned diamond drills.

Due to the proximity of the #2D zone to the #4 shaft (650 feet) and its significant resource potential, any new mineral resources that can be defined 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. Titan is currently assessing how to expedite development of this zone. Preliminary engineering

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<sup>(1)</sup> Refer to the technical report entitled "NI 43-101 Preliminary Economic Assessment Updated Technical Report, Empire State Mines, Gouverneur, New York, USA", dated May 24, 2018 ("2018 PEA"); the mineral resource estimate in the 2018 PEA is dated January 31, 2018.

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design has commenced, including the collection and geotechnical testing of mineralized samples, and the optimal mining method is being determined.

**New Mexico**

The Company began prospecting for base metals in an area of New Mexico in 2017 after being introduced to the area pursuant to an agreement with Arizona Mining Inc. ("Arizona") and/or its wholly owned subsidiary Arizona Minerals Inc., companies previously related by virtue of certain common directors and management. The agreement enabled the Company to explore the area and take title to any claims subject to a back-in right whereby Arizona could acquire a 60% interest in the claims on payment of two times the exploration expenditures at that time. In accordance with the agreement, as a result of the change of control of Arizona on August 10, 2018, the agreement was terminated, with Titan retaining interest in the claims.

In July 2018, the Company obtained the permit for its 18-hole drill program on the unpatented mineral claims and completed its first phase of its drilling program which included 10 holes totaling approximately 6,500 feet. Results from the drill program indicate possible economic grades of copper (>0.5%) in intervals of up to 50 feet thick, and several intervals ranging from 5 feet to 10 feet, with an average grade of up to 1% copper. Titan is encouraged by the results of the 2018 exploration program and plans on maintaining the current land position while evaluating future exploration activities.

**TREND ANALYSIS**

**Selected Annual Information**

	<b>2018</b>	<b>2017</b>	<b>2016</b>
Revenue revaluation	\$(1,552)	-	-
Net loss	\$15,857	\$11,031	\$66
Basic & diluted loss per share	\$0.16	\$0.16	\$0.01
	<b>December 31, 2018</b>	<b>December 31, 2017</b>	<b>December 31, 2016</b>
Total assets	\$73,201	\$60,835	39,014
Total non-current financial liabilities	\$31,205	\$14,698	\$14,111

**Summary of Quarterly Results**

	<b>2018</b>				<b>2017</b>			
	<b>Q4</b>	<b>Q3</b>	<b>Q2</b>	<b>Q1</b>	<b>Q4</b>	<b>Q3</b>	<b>Q2</b>	<b>Q1</b>
Revenue revaluation	344	300	909	-	-	-	-	-
Net loss	4,871	5,979	3,422	1,583	2,527	3,069	3,430	2,005
Basic & diluted loss per share	0.05	0.06	0.03	0.01	0.03	0.05	0.06	0.03
Cash and cash equivalents	2,290	607	4,505	11,571	25,168	48	1,224	4,683
Total assets	73,201	58,603	58,234	60,833	60,835	31,738	32,840	36,059
Total liabilities	45,962	27,229	21,452	21,061	19,354	29,286	27,833	27,764

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.



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

Activities in the first three quarters of 2017 reflect the ongoing care and maintenance costs of ESM, and costs incurred for the preparation of a 43-101 Preliminary Economic Assessment technical report on ESM. During this period, the Company also onboarded a full site management team, along with technical support staff in the geology and engineering departments. Activities to advance the refurbishment of the mine during the first three quarters of 2017 were limited by the availability of funding.

In the fourth quarter of 2017, the Company completed an IPO, raising a total of \$41,429 before fees, and paid \$9,119 of the liabilities that arose on the acquisition of ESM. Following the IPO, 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, resulting in a decrease in the net loss in the fourth quarter of 2017 and the first quarter of 2018, and a decrease in cash and cash equivalents in the first and second quarter of 2018.

During the second quarter of 2018, the Company completed the refurbishment activities. However, the Company has not yet declared commercial production as ESM has been unable to sustain production of ore at rates that management intended. Therefore, the Company continues 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 and fourth quarters of 2018.

The increase in net losses since 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.

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

## FINANCIAL REVIEW

### Financial Results

(\$000's)	Three months ended December 31	Year ended December 31
<b>Net loss for the 2017 period</b>	\$2,527	\$11,031
Increase (decrease) in components of loss:		
Revenues (Provisional pricing adjustments)	344	1,552
Other operating expenses	1,491	3,542
Other expenses and income	508	(268)
<b>Net loss for the 2018 period</b>	<b>\$4,870</b>	<b>\$15,857</b>

During the three months and year ended December 31, 2018, the Company recorded a negative mark-to-market adjustment on its revenue as a result of downward provisional pricing adjustments.

Other operating expenses increased during the three months and year ended December 31, 2018 compared to the prior-year periods due to increase in the Company's activities associated with the development of ESM which began during the fourth quarter 2017. General and administration ("G&A") expenses and exploration and evaluation ("E&E") expenses increased, but were partially offset by decreased care and maintenance ("C&M") costs which ceased once the Company started its refurbishment activities on November 1, 2017.

During the fourth quarter 2018, other expenses/(income) increased compared to the prior year primarily due to an increase in interest expense, a reduction in interest income and foreign exchange losses. During the year

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ended December 31, 2018, other expenses/(income) decreased mainly due to the acquisition obligation amendment fee of \$500 paid in the three months ended June 30, 2017.

**Revenue**

(\$000's)	Three months ended December 31	Year ended December 31
Provisional pricing adjustments	\$344	\$1,552

Revenue for the three months and year ended December 31, 2018 comprises downward provisional pricing adjustments resulting in a loss for the period. Revenue realized during the commissioning phase of the Empire State Mine is recorded as a credit to mineral property, plant and equipment

**Other operating (income) expenses**

(\$000's)	Three months ended December 31,				Year ended December 31,			
	2018	2017	Change	%	2018	2017	Change	%
<b>G&amp;A expenses:</b>								
Salaries and benefits	\$494	\$334	\$160	48	\$2,586	\$883	\$1,703	193
Share-based compensation	524	339	185	55	1,785	956	829	87
Professional fees	147	296	(149)	(50)	807	456	351	77
Office and administration	106	567	(461)	(81)	578	756	(178)	(24)
Investor relations	109	88	21	24	343	112	231	206
	\$1,380	\$1,624	(\$244)	(15)	\$6,099	\$3,163	\$2,936	93
<b>E&amp;E expenses:</b>								
Drilling	\$2,306	-	\$2,306	-	\$6,371	\$1,431	\$4,940	345
Salaries and benefits	266	-	266	-	682	92	590	641
Other	23	87	(64)	(74)	288	225	63	28
	\$2,595	\$87	\$2,508	2,883	\$7,341	\$1,748	\$5,593	320
<b>C&amp;M costs:</b>								
Site expenditures	-	\$674	(\$674)	(100)	-	\$4,008	(\$4,008)	(100)
Depreciation	-	99	(99)	(100)	-	979	(979)	(100)
	-	\$773	(\$773)	(100)	-	\$4,987	(\$4,987)	(100)

Compared to the same periods of fiscal 2017, G&A expenses for the three months and year ended December 31, 2018 have increased, reflecting the increase in corporate activities to support the site operations. The increase in salaries and benefits and share-based compensation expense reflects the appointment of senior executives following the completion of the Company's IPO in the fourth quarter of 2017, the severance payment related to the departure of an executive, and the grant of stock options in 2018.

E&E expenses primarily relate to drilling costs. Drilling expenses increased for the three months and year ended December 31, 2018 compared to the same periods in 2017 as the Company continued its planned 2018 drilling programs, focusing the exploration program on drilling of near-mine targets.

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C&M costs comprise the costs necessary to maintain a skeleton staff on site for security purposes, to maintain the buildings and infrastructure, and to ensure the operation remains in compliance with environmental and other regulations. ESM was on C&M until the completion of the IPO in the fourth quarter of 2017, following which the mine entered the development stage. During the development stage, all mine site costs including G&A expenses, but excluding E&E expenses, were capitalized to mineral properties, plant and equipment as construction-in-progress. These costs continue to be capitalized until the declaration of commercial production in accordance with the Company's accounting policy.

**Other expenses/(income)**

(\$000's)	Three months ended December 31,				Year ended December 31,			
	2018	2017	Change	%	2018	2017	Change	%
Interest and other finance expenses	346	30	316	1,053	476	357	119	33
Accretion expense	105	84	21	25	391	341	50	15
Interest income	(3)	(51)	48	(94)	(111)	(78)	(33)	42
Foreign exchange loss (income)	103	(20)	123	(615)	67	(1)	68	(6,800)
Acquisition obligation amendment fee	-	-	-	-	-	525	(525)	(100)
Other expenses (income)	-	-	-	-	42	(11)	53	(482)
	551	43	508	1,181	865	1,133	(268)	(24)

The increase in other expenses for three months ended December 31, 2018, compared to the same period of 2017 was primarily due to interest expense associated with credit facilities entered in 2018, a decrease in interest income that corresponds with the lower cash balance, and slightly higher accretion expense.

For 2018, the decrease in other expenses compared to 2017 was mainly due to the acquisition and obligation amendment fee incurred in 2017. Interest expense in 2018 was related to the credit facilities entered in 2018. Interest expense in 2017 was related to the Company's loan from a company controlled by Titan's Executive Chairman, related to the acquisition of ESM and for subsequent funding. This loan was settled in the fourth quarter of 2017.

**Income taxes**

For both 2018 and 2017, the Company has reported nil for income tax expense.

**LIQUIDITY AND CAPITAL RESOURCES**

**Credit Facilities**

*Bank of Nova Scotia*

In April 2018, the Company entered into a \$15,000 secured credit agreement (the "Credit Facility") with the Bank of Nova Scotia ("Lender") to finance working capital and general corporate requirements. The Credit Facility will be available to the Company on a revolving basis, up to maximum amounts as follows: \$5,000 on closing until first shipment (completed); \$10,000 from first shipment until commercial production (as defined in the credit agreement); and \$15,000 on and after commercial production. The maturity date is April 3, 2020.

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; total leverage ratio of not more than 2.5 to 1; and tangible net worth of an amount greater

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than or equal \$30 million plus 50% of consolidated net income. Effective August 7, 2018, the Credit Facility agreement was amended to reflect that the financial covenants related to interest coverage and leverage ratios under the original agreement are not applicable for periods prior to September 30, 2018.

On September 30, 2018, the Company did not meet its interest coverage ratio and total leverage ratio. From October 2, 2018 to November 10, 2018, production and operations ceased at the Empire State Mine causing an event of default of the Credit Facility. In December 2018, the Lender waived the aforesaid events of default, and consented to the \$18,710 loan from related party provided it is subordinate to the Credit Facility. On December 31, 2018, the Company was in default of the tangible net worth covenant.

On January 21, 2019, the Company and the Lender amended the Credit Facility whereby a maximum of \$10,000 was available to the Company on a revolving basis. Prior to March 31, 2019, the Lender may reduce the maximum amount available to \$6,000, subject to the business and financial plan provided by the Company. A \$6,000 guarantee has been provided by a company controlled by Titan's Executive Chairman. As of the date of this MD&A, the Company has drawn \$10,000 on the Credit Facility.

#### *Related Party Loan*

On November 30, 2018, the Company entered a \$18,710 subordinate general security credit agreement with a company controlled by Titan's Executive Chairman. This is a non-revolving facility and any repayment cannot be reborrowed. The maturity date is November 30, 2020. As at the date of this MD&A, a total of \$17.6 million was drawn.

Pursuant to this credit agreement, the Company issued 2,500,000 warrants to a company controlled by Titan's Executive Chairman in January 2019. Each warrant is exercisable for one common share of the Company for a period of five years, at an exercise price of C\$1.40.

#### **Financial Condition**

	<b>December 31, 2018</b>	<b>December 31, 2017</b>
Cash and cash equivalents	\$2,290	\$25,168
Total debt	\$19,771	-
Net debt (cash)	\$17,481	(\$25,168)
Working capital (negative)	(\$7,653)	\$21,228

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Cash and cash equivalents decreased by \$22,878 during 2018 as operations at ESM are not yet cash flow positive as they have not yet achieved commercial production. Furthermore, the Company is undertaking a significant exploration program and continues to invest in mine development and plant and equipment at ESM. These factors were offset by funding received during the year.

At December 31, 2018, the Company's debt comprised the Credit Facility of \$3,912, equipment loans of \$1,050 and the loan from a related party of \$14,809. The entire Credit Facility and \$329 of the equipment loans are classified as current whereas \$721 of the equipment loans and the entire loan from related party are classified as a long-term liability.

Working capital decreased significantly during 2018. In addition to the decrease in cash and cash equivalents, the primary contributors to the decrease in working capital were an increase in the current portion of debt and the warrant derivative liability. The increases in trade and other receivables, inventories and other current assets associated with the ramp up of activity at ESM were almost completely offset by an increase in trade and other payables, which is also attributed to the ramp up at ESM.

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#### Cash Flows

	Year ended December 31,		Change
	2018	2017	
Operating cash flows before changes in working capital	(13,444)	(7,911)	(5,533)
Changes in working capital	(1,748)	(151)	(1,597)
Net cash flows used in operating activities	(15,192)	(8,062)	(7,130)
Net cash flows used in investing activities	(28,448)	(2,567)	(25,881)
Net cash flows provided by financing activities	20,957	27,737	(6,780)
	(22,683)	17,108	(39,791)

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

Cash flows from financing activities in 2018 reflect the amounts drawn on the Credit Facility and the loan from related party, net of associated transaction costs and interest payments. In addition, the Company received \$1,588 from a previously-related company with respect to the provisions of agreements governing certain shared operating leases. In 2017, cash flows from financing activities primarily reflects \$38,465 in net proceeds from the Company's IPO, less the payment of \$11,171 of acquisition obligations.

#### Capital Expenditures

Cash flows used in investing activities in 2018 relate to the expenditures spent on the refurbishment of the mine, as well as all mine site costs associated with operating ESM during the pre-commercial production period, net of revenue received. During 2017, investing activities commenced in the fourth quarter.

#### Liquidity

As at December 31, 2018, the Company had total liquidity of \$5,305, comprised of cash and cash equivalents of \$2,290 and \$3,015 available under its loan with related party. The Company had negative working capital of \$7,653 and a deficit of \$26,955 as at December 31, 2018, and negative operating cash flows before changes in working capital of \$13,444 and a net loss of \$15,857 for the year ended December 31, 2018.

Based on the Company's restructuring plan announced in February 2019, the Company will require additional funding in 2019. 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 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 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.

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**Contractual obligations and commitments**

The Company's contractual obligations and commitments as at December 31, 2018 and their approximate timing of payment are as follows:

	2019	2020	2021	2022	thereafter	Total
Debt:						
Repayment of principal	\$4,329	\$16,416	-	-	-	\$20,745
Repayment of interest	90	167	-	-	-	257
Operating leases	800	695	497	114	-	2,106
Capital expenditures	420	105	105	-	-	630
Reclamation and remediation provision	-	-	-	-	19,503	19,503
	\$5,639	\$17,383	\$602	\$114	\$19,503	\$43,241

**Outstanding Securities**

As of the date of this MD&A, the Company had 101,970,757 common shares issued, and 2,500,000 warrants and 8,326,667 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 availability period for advances ends November 30, 2019. 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 issued 2,500,000 transferable warrants to a company controlled by Titan's Executive Chairman in January 2019. Each warrant is exercisable for one common share of the Company for a period of five years, at an exercise price of C\$1.40. The fair value of the warrants as at the loan agreement date of November 30, 2018 has been recorded as borrowing costs.

As at December 31, 2018, the carrying value of the Loan was as follows:

Proceeds received	\$	15,695
Borrowing costs (warrants)		(1,099)
		14,596
Accrued interest		167
Amortization of borrowing costs		46
Carrying value	\$	14,809

As part of the acquisition of the Empire State Mine, the Company assumed \$3,319 in debts from Star Mountain owing to a company controlled by Titan's Executive Chairman. Concurrent with the closing of the acquisition, the Company entered into a debenture agreement (the "Original Debenture") with this related party whereby the amounts owed were to be paid by on demand or December 31, 2017, whichever was earlier. The Original Debenture bore interest at 12% per annum. In August 2017 and September 2017, the Company entered into

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additional debenture agreements (the "Additional Debentures") to borrow an additional \$800 from this related party. The Additional Debentures had an upfront fee of 2% due upon funding and the same terms and conditions as the Original Debenture. On October 20, 2017, the Company repaid the principal plus all interest and fees owing.

**Management company**

The Company shares office space, equipment, personnel and various administrative services with other companies related to it by virtue of certain directors and management in common. These related parties comprise Arizona Mining Inc. ("Arizona Mining") until August 10, 2018, NewCastle Gold Ltd. ("NewCastle") until December 22, 2017, and Armor Minerals Inc. These services have been mainly provided through a management company ("Manco"), which is equally owned by the related companies. Advances are made to Manco to fund these services. Costs incurred by Manco are allocated between the companies at cost based on time incurred and services used, and are deducted from the advances made to Manco.

Provisions of agreements governing certain shared operating leases required both NewCastle and Arizona Mining to make a payment to Manco upon each company's change of control (to cover its share of the outstanding operating lease commitment). Both these payments were redistributed to the remaining shareholders of Manco in 2018. The Company recognized its share as a deferred rental contribution on the balance sheet.

	Year ended December 31,	
	2018	2017
Reimburse Manco for the following services:		
Salaries and benefits	\$ 1,684	\$ 868
Office and administration expenses	242	184
Rent	354	120
Investor relations	85	57
Other expenses	42	22
	\$ 2,408	\$ 1,251
Deferred rental contributions received from Manco	\$ 1,588	\$ -

	December 31, 2018	December 31, 2017
Advances to Manco	\$ 105	\$ 41

Other assets of \$111 (December 31, 2017 - \$100) relate to the Company's share of jointly-owned assets (primarily leasehold improvements and furniture and equipment) held by the management company.

**Other related party transactions**

Accounts receivable included an amount payable to Arizona Mining of nil (December 31, 2017 - \$3) related to the reimbursement of expenses incurred on the Company's behalf.

The Company began prospecting for base metals in an area of New Mexico in 2017 after being introduced to the area pursuant to an agreement with Arizona Mining and/or its wholly owned subsidiary Arizona Minerals Inc., companies previously related by virtue of certain common directors and management. The agreement enables the Company to explore the area and take title to any claims subject to a back-in right whereby Arizona Mining can acquire a 60% interest in the claims on payment of two times the exploration expenditures at that time. In accordance with the agreement, the agreement terminates and is of no further effect with Titan retaining interest in the claims on the earlier of (i) a written termination notice by Arizona Mining, (ii) a change of control of Arizona Mining or (iii) expiry of three years. On August 10, 2018, as a result of a change of control of Arizona Mining, the agreement terminated with Titan retaining interest in the claims.

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#### 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 comprise the Company's Executive Chairman, Chief Executive Officer, President, Chief Financial Officer, Chief Operating Officer and Directors.

	Year ended December 31,	
	2018	2017
Salaries and benefits	\$ 832	\$ 668
Termination benefits	606	-
Share-based compensation	1,159	800
Directors' fees	261	-
	\$ 2,858	\$ 1,468

  

	December 31,	
	2018	2017
Termination benefits payable – current	\$ 220	\$ -
Termination benefits payable – non-current	367	-
	\$ 587	\$ -

#### ACCOUNTING CHANGES AND CRITICAL ESTIMATES

##### Estimates and judgments

The preparation of 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;
- Assessment of impairment;
- Fair value measurement
- Functional currency determination;
- Determination of useful life of assets for depreciation purposes;
- Share-based compensation;
- Taxation; and
- Determination of technical and commercial feasibility



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See note 3 of our 2018 annual audited financial statements for a detailed discussion of these accounting estimates and judgments.

#### **Changes in accounting policies**

During the period, the Company initially applied new policies for revenue recognition and financial instruments. See note 4 of our 2018 annual audited financial statements for a detailed discussion of the changes in accounting policies.

#### **New standards not yet adopted**

Effective January 1, 2019, a new standard for leases will be adopted by the Company. This standard requires lessees to account for all leases on-balance sheet. A lessee will recognize a liability to make lease payments (i.e., the lease liability) and an asset representing the right to use the underlying asset during the lease term (i.e., the right-of-use asset). Lessees will be required to separately recognize the interest expense on the lease liability and the depreciation expense on the right-of-use asset.

In 2018, the Company initiated a detailed impact assessment and implementation project which included reviewing contracts, aggregating data to support the evaluation of the accounting impacts and identifying where key accounting policy decisions were required. Work completed by the Company to date indicates the new leases standard is expected to have a material effect on the financial statements as it will significantly increase the Company's recognized assets and liabilities.

The Company's existing operating leases will be the main source of leases under the new standard. Information on the Company's operating leases is disclosed in the commitments table in this MD&A.

Refer to note 4 of our 2018 annual audited financial statements for additional details on the new standard and its expected impact on the Company's financial statements.

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

The CEO and the CFO, with the assistance of management, conducted an evaluation of the effectiveness of the Company's internal control over financial reporting (ICFR) as at December 31, 2018. Based on the evaluation, the CEO and the CFO have concluded that as at December 31, 2018, the Company's internal control over financial reporting is effective, based on the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) on Internal Control – Integrated Framework (2013).

Our internal control system over disclosure controls and procedures is designed to provide reasonable assurance that material information relating to the Company is made known to management and disclosed to others and information required to be disclosed by the Company in our annual filings, interim filings or other reports filed or submitted by us under securities legislation is recorded, processed, summarized and reported within the time periods specified in the securities legislation.

As discussed above, the inherent limitations in all control systems are such that they can provide only reasonable, not absolute, assurance that all control issues and instances of fraud or error, if any, within the Company have been detected. Therefore, no matter how well-designed, internal controls over financial reporting has limitations and can provide only reasonable assurance with respect to financial statement preparation and may not prevent and detect all misstatements.

As of the end of the period covered by this MD&A and accompanying financial statements, management evaluated the effectiveness of its disclosure controls. Based on that evaluation, the CEO and the CFO have concluded that the Company's disclosure controls and procedures and internal control over financial reporting, provide reasonable assurance that they were effective. There have been no changes in our internal control over financial reporting during the year ended December 31, 2018 that have materially affected, or are reasonably

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likely to materially affect, internal control over financial reporting.

#### 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.

Forward-looking information includes, but is not limited to, the Company's expectation for obtaining funding and expectation for achieving commercial production at the Empire State Mine, and the statements in the "Strategy and Outlook" section in this document.

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.

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:

- the Balmat-Edwards mining district remains underexplored;
- the success of exploration and development activities at ESM;
- the potential for significant resource expansion and production growth;
- the success of changes being implemented at ESM to address the 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;
- achieving the targeted completion date for a revised mine plan of mid-2019;
- the ability to execute the planned 2019 drill programs, including a 20-hole program at the New Fold zone;
- 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;

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- 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).

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.

#### **Qualified Person**

The technical and scientific information in this MD&A has been 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](http://www.sedar.com).