

Management's Discussion and Analysis for the Three and Six Months Ended December 31, 2019

# **TABLE OF CONTENTS**

1.	Business Overview	3
2.	Second Fiscal Quarter 2020 Operating and Financial Highlights	3
3.	Operating Statistics	4
4.	Operations Discussion	4
5.	Financial Operating Results	6
6.	Summary of Quarterly Results	8
7.	Mine Permitting	9
8.	Exploration	9
9.	Liquidity and Capital Resources	10
10.	Subsequent Events	10
11.	Contractual Obligations	10
12.	Off-Balance Sheet Arrangements	10
13.	Related Party Transactions	11
14.	Key Management Personnel Compensation	12
15.	Conflicts of Interest	12
16.	Proposed Transactions	12
17.	Adoption of New Accounting Standards	12
18.	Future Accounting Policy Changes Issued but not yet in Effect	12
19.	Corporate Governance	12
20.	Outstanding Share Data	12
21.	Fair Value Measurements and Financial Risk Management	13
22.	Risks and Uncertainties	14
23.	Disclosure Controls and Procedures and Internal Controls Over Financial Reporting	16
24.	Cautionary Note Regarding Forward-Looking Information	16
25.	Approval	17
26.	Additional Information	17

#### NORTHERN VERTEX MINING CORP.

# Management's Discussion and Analysis for the Three and Six Months Ended December 31, 2019

The Management's Discussion and Analysis ("MD&A") of Northern Vertex Mining Corp. ("Northern Vertex" or the "Company"), has been prepared by management as of February 27, 2020 and provides information that management believes is relevant to assessing and understanding the financial condition of the Company and the results of its operations and cash flows for the three and six months ended December 31, 2019. This MD&A provides information on the operations of the Company for the three and six months ended December 31, 2019 and should be read in conjunction with the condensed interim consolidated financial statements for the three and six months ended December 31, 2019 and 2018 and related notes thereto (the "Financial Statements"), as well as the audited annual consolidated financial statements for the year ended June 30, 2019, which have been prepared in accordance with International Financial Reporting Standards ("IFRS"), as issued by the International Accounting Standards Board ("IASB"). **All dollar amounts in this MD&A are expressed in thousands of USD, except as otherwise noted.** 

Unless otherwise indicated, the technical disclosure contained within this MD&A has been reviewed and approved by Mr. L.J. Bardswich, P.Eng., President of Golden Vertex Corp. ("Golden Vertex") and a Qualified Person for the purpose of National Instrument 43-101 ("NI 43-101"), Standards of Disclosure for Mineral Projects.

#### 1. Business Overview

Northern Vertex is a gold producer engaged in the acquisition, exploration, development and operation of mineral properties located in the United States. The Company's principal operation is the 100% owned Moss Mine in Mohave County, Arizona which commenced commercial production as of September 1, 2018 after construction and commissioning were completed. The Company's management and technical team are proven professionals with extensive experience in all aspects of mineral exploration, mine development, operations and capital markets. Key strategic priorities for the Company, now that the Moss Mine has entered commercial production, are to generate positive cashflow from operations and to acquire accretive assets with long term growth potential.

The Company is listed on the TSX Venture Exchange ("TSXV") and its common shares trade under the symbol NEE.

#### 2. Second Fiscal Quarter 2020 Operating and Financial Highlights

- During the quarter the Moss Mine produced 7,131 gold ounces and 58,838 silver ounces even though production was affected by crushing oversized ore which impacted ounce placement at the beginning of the quarter.
- Gold and silver sales were \$11,292 as 6,925 gold ounces and 61,183 silver ounces were sold with average realized prices per ounce of \$1,476 and \$17.46 respectively.
- Operating income from mine operations, before depreciation and depletion, was \$2,343.
- The crushing plant processed 496,698 tonnes of ore with an average gold grade of 0.75 g/t and an average silver grade of 15.69 g/t.
- An infill drilling program was completed within the western area of the Moss Mine and west of current mining operations with gold results including 45 feet of 1.388 g/t, 25 feet of 1.488 g/t and 140 feet of 0.919 g/t.
- Construction of a leach pad expansion, to the north of the existing leach pad and on patented land, commenced and is expected to be completed by the end of the third fiscal guarter ending March 31, 2020.

## 3. Operating Statistics

		Three Months Ended December 31, 2019	Three Months Ended December 31, 2018	Six Months Ended December 31, 2019	Six Months Ended December 31, 2018
Mining					
Ore mined	t	521,818	411,354	974,236	892,569
Waste mined	t	847,901	883,088	1,895,908	1,607,969
Total mined	t	1,369,718	1,294,442	2,870,144	2,500,538
	waste				
Strip ratio	/ore	1.62	2.15	1.95	1.80
Crushing					
Tonnes stacked	t	496,698	349,592	949,556	742,081
Tonnes stacked per day		150,050	313,332	3 13,330	7 12,001
(average)	tpd	5,399	3,800	5,161	4,033
Contained gold ounces stacked	OZ.	12,043	7,754	21,781	17,642
Contained silver ounces stacked	oz.	205,649	113,412	356,382	213,654
Gold grade	g/t	0.75	0.70	0.71	0.74
Silver grade	g/t	12.88	10.03	11.67	8.96
Processing					
Merrill Crowe recovery – gold	%	98	69	97	77
Merrill Crowe recover – silver	%	98	93	98	94
Gold ounces produced 4	OZ.	7,131	5,218	15,591	10,772
Silver ounces produced <sup>4</sup>	OZ.	58,838	21,110	127,259	41,646
·		,500	,	,	,-
Sales		6.035	F 140	16.027	10.553
Gold ounces sold 5	OZ.	6,925	5,149	16,037	10,553
Silver ounces sold <sup>5</sup>	OZ.	61,183	14,081	134,678	33,118

<sup>&</sup>lt;sup>1</sup> The Moss Mine commenced commercial production effective September 1, 2018. In relation to this, only financial operating results from this date are recognized in the Company's Condensed Interim Consolidated Statements of Loss and Comprehensive Loss for the three and six months ended December 31, 2018. Financial operating results from the Moss Mine prior to September 1, 2018 were capitalized to property, plant and equipment.

#### 4. Operations Discussion

The Company operates an open pit mine and extracts precious metals with a heap leach and Merrill Crowe circuit to produce gold and silver dore.

## **Mining**

During the three months ended December 31, 2019 a total of 521,818 tonnes (2018: 411,354) of ore were mined and 847,901 tonnes (2018: 883,088) of waste were mined for a total of 1,369,718 tonnes (2018: 1,294,442) of material hauled.

<sup>&</sup>lt;sup>2</sup> The operating statistics for the six months ended December 31, 2018 include pre-commercial production results.

<sup>&</sup>lt;sup>3</sup> Crushing statistics for the three and six months ended December 31, 2018 have been adjusted from previously released statistics due to a change in the Company's estimate of tonnes and contained ounces stacked during the six months.

<sup>&</sup>lt;sup>4</sup> The six months ended December 31, 2018 includes 3,672 gold ounces and 12,009 silver ounces that were produced pre-commercial production being the two months ended August 31, 2018.

<sup>&</sup>lt;sup>5</sup> The three months ended December 31, 2018 includes 470 gold ounces and 1,779 silver ounces that were produced during precommercial production and sold during the second fiscal quarter of 2019. The six months ended December 31, 2018 includes 4,924 gold ounces and 16,376 silver ounces that were produced during pre-commercial production being the four months ended December 31, 2018.

During the six months ended December 31, 2019 a total of 974,236 tonnes (2018: 892,569) of ore were mined and 1,895,908 tonnes (2018: 1,607,969) of waste were mined for a total of 2,870,144 tonnes (2018: 2,500,538) of material hauled.

Mining production for the quarter focused on advancing the benches in the center pit, improving wall control and commenced pioneering in the eastern pit. Ore fragmentation under current drilling and blasting practices with the mining contractor had been decreasing during the previous quarter which increased the amount of oversized ore. To improve ore fragmentation, and decrease the amount of oversize ore, a separate drilling and blasting contractor was engaged and mobilized at the Moss Mine early in the quarter with positive results. Stripping decreased during the quarter compared to the previous quarter as more ore was experienced than the resource model indicated.

Operations are currently permitted to mine and operate on the Company's patented land and not on adjacent federal lands which are under the jurisdiction of the Bureau of Land Management ("BLM"). As a result, mining operations are constrained due to the size and topography of the patented land, the pit and leach pad footprints and the general site layout which limits operating space and impacts operational efficiencies. The Company is currently in the process of permitting the expansion of operations onto federal lands through the filing of a Mine Plan of Operations ("MPO") with the BLM which would provide a larger area to operate and allow the Company to extend the life of the mine. Additional details regarding permitting are disclosed in the *Mine Permitting* section of this MD&A.

## **Crushing Operations**

During the three months ended December 31, 2019 a total of 496,698 tonnes (2018: 349,592) of ore were crushed at an average gold grade of 0.75 g/t (2018: 0.70 g/t) and an average silver grade of 12.88 g/t (2018: 10.03g/t). Tonnes crushed for the three months ended December 31, 2019 resulted in 12,043 contained gold ounces (2018: 7,754) and 205,649 contained silver ounces (2018: 113,412) stacked on the leach pad. The average daily crushing rate was 5,399 tonnes per day (2018: 3,800).

During the six months ended December 31, 2019 a total of 949,556 tonnes (2018: 742,081) of ore were crushed at an average gold grade of 0.71 g/t (2018: 0.74 g/t) and an average silver grade of 11.67 g/t (2018: 8.96g/t). Tonnes crushed for the six months ended December 31, 2019 resulted in 21,781 contained gold ounces (2018: 17,642) and 356,382 contained silver ounces (2018: 213,654) stacked on the leach pad. The daily crushing rate was 5,161 tonnes per day (2018: 4,033).

Crushing throughput increased during the quarter and six months ended December 31, 2019, compared to the previous year, as the Moss Mine experienced an electrical shutdown during the previous year and was still ramping up operations. Increased throughput was also achieved as additional crews were run compared to the previous year which decreased scheduled downtime. Although crushing throughput increased compared to the previous year, throughput was reduced during the first portion of the quarter as a portable crusher was brought in to eliminate the remaining stockpile of oversized ore caused by drilling and blasting practices. Crushing throughput improved towards the end of the quarter after the oversized ore was processed and the crushing feed was replaced with better fragmented ore due to improved drilling and blasting practices.

## **Processing Operations**

During the three months ended December 31, 2019 a total of 7,131 Au ounces (2018: 5,218) and 58,838 Ag ounces (2018: 21,110) were produced. Merrill Crowe plant recoveries were 98% for gold (2018: 69%) and 98% for silver (2018: 93%).

During the six months ended December 31, 2019 a total of 15,591 Au ounces (2018: 10,772) and 127,259 Ag ounces (2018: 41,646) were produced. Merrill Crowe plant recoveries were 97% for gold (2018: 77%) and 98% for silver (2018: 94%).

Continued refinement and changes have been implemented at the Moss Mine with regards to pad solution management strategies, heap pad inventory and Merrill Crowe optimizations during the year. Ongoing columns and bottle roll testing continue to support the gold recovery rates at or above feasibility parameters and are quicker than expected compared to the feasibility study, recovering 60% within 45 days compared to the feasibility study estimate of 150 days. Production increased compared to the previous year's periods as the heap pad inventory contained ounces in the central and west panels which were leached during the primary leach cycle but not returned for processing in the Merrill Crowe plant until

this fiscal year and due to Merrill Crowe optimizations which improved plant flow and recoveries. Production decreased compared to the previous quarter as decreased crushing throughput, due to crushing of oversized ore, affected ounce placement towards the end of the previous quarter and the beginning of the current quarter.

Construction of a leach pad expansion, to the north of the existing leach pad and on patented land, commenced and is expected to be completed by March 31, 2020, with stacking and leaching plans having already been developed.

#### Sales

During the three months ended December 31, 2019 the Company sold a total of 6,925 gold ounces and 61,183 silver ounces for total sales of \$11,292 (2018: 4,679 gold ounces and 12,302 silver ounces sold, for total sales of \$5,855). Silver sales were effected through deliveries of silver to Maverix Metals Inc. ("Maverix") in accordance with the Silver Streaming Agreement. Average realized prices for the three months for gold and silver per ounce were \$1,476 and \$17.46 (2018: \$1,214 and \$14.39) respectively.

During the six months ended December 31, 2019 the Company sold a total of 16,037 gold ounces and 134,678 silver ounces for total sales of \$25,923 (2018: 5,629 gold ounces and 16,742 silver ounces sold, which were produced after commercial production commenced on September 1, 2018, for total sales of \$7,050). Silver sales were effected through deliveries of silver to Maverix Metals Inc. ("Maverix") in accordance with the Silver Streaming Agreement. Average realized prices for the six months for gold and silver per ounce were \$1,471 and \$17.29 (2018: \$1,210 and \$14.33) respectively.

## 5. Financial Operating Results

For the three months ended December 31, 2019 the Company had operating income before depreciation and depletion of \$2,343 and \$532 for the three months ended December 31, 2018. For the six months ended December 31, 2019 the Company had operating income from mine operations before depreciation and depletion of \$6,129 and \$742 for the six months ended December 31, 2018 which included four months of commercial production at the Moss Mine. Operating income before depletion and depreciation increased for the three and six months ending December 31, 2019 compared to the prior year due to increased gold and silver sales and higher metals prices. Operating income before depreciation and depletion decreased for the three months ended December 31, 2019 compared to the previous quarter as crushing of oversized ore at the end of the first fiscal quarter and the beginning of the current fiscal quarter impacted crusher throughput, stacked ounces, production and sales along with an increase of crushing costs.

A decrease in finance costs for the three months ended December 31, 2019, compared to the prior year, was due to a decrease in interest expense as the senior secured credit facility was fully repaid in December 2018, which was mostly offset by a non-cash fair value loss relating to the silver stream embedded derivative due to rising silver prices during the quarter. Loss for the quarter included \$3,648 of non-cash finance costs.

An increase in finance costs for the six months ended December 31, 2019, compared to the prior year, was due to a non-cash fair value loss on the silver stream embedded derivative due to rising silver prices. Loss for the quarter included \$8,642 of non-cash finance costs.

The loss for the three and six months ended December 31, 2019 and 2018 is comprised of the following items:

		<b>Three Month</b>	ns Ended	Six M	Six Months Ended				
	December 31,				D	December 31,			
		2019	2018		2019		2018		
Operating income before depreciation and depletion	\$	2,343 \$	532	\$	6,129	\$	742		
Depreciation and depletion		(2,466)	(1,135)		(5,766)		(1,313)		
(Loss) earnings from mine operations		(123)	(603)		363		(571)		
Corporate administrative expenses		(642)	(592)		(1,372)		(1,350)		
Finance costs		(4,170)	(4,240)		(9,640)		(4,761)		
Foreign exchange (loss) gain		(145)	169		(75)		269		
Net loss for the period	\$	(5,080) \$	(5,266)	\$	(10,724)	\$	(6,413)		

<sup>1</sup> The Moss Mine commenced commercial production effective September 1, 2018. In relation to this, 2018 figures shown in the table above reflect financial operating results for the one and four months ended December 31, 2018, with September 2018 being the first month of commercial production. Financial operating results from the Moss Mine prior to September 1, 2018 were capitalized to property, plant and equipment.

## **Earnings from Mine Operations**

Earnings from mine operations for the three and six months ended December 31, 2019 and 2018 are comprised of the following:

	Three Montl Dece	hs Ended mber 31,	Six Months Ended December 31		
	2019	2018	2019	2018	
Revenue	\$ 11,253 \$	5,792 \$	25,803 \$	6,976	
Production costs	(8,231)	(4,895)	(18,062)	(5,787)	
Royalties	(679)	(365)	(1,612)	(447)	
Operating income before depreciation and depletion	2,343	532	6,129	742	
Depreciation and depletion	(2,466)	(1,135)	(5,766)	(1,313)	
Loss from mine operations	\$ (123) \$	(603) \$	<b>363</b> \$	(571)	

<sup>&</sup>lt;sup>1</sup> The Moss Mine commenced commercial production effective September 1, 2018. In relation to this, 2018 figures shown in the table above reflect financial operating results for the one and four months ended December 31, 2018, with September 2018 being the first month of commercial production. Financial operating results from the Moss Mine prior to September 1, 2018 were capitalized to property, plant and equipment.

Earnings from mine operations, excluding depreciation and depletion, were \$2,343 for the three months ended December 31, 2019 (2018: \$532). During the three months ended December 31, 2019 the Company sold 6,925 gold ounces (2018: 4,679 gold ounces which were produced after commercial production commenced on September 1, 2018) with an average realized gold price of \$1,476 (2018: \$1,214). Revenue is presented net of treatment and refining costs which were \$39 for the three months ended December 31, 2019 (2018: \$63).

Earnings from mine operations, excluding depreciation and depletion, were \$6,129 for the six months ended December 31, 2019 (2018: \$742). During the six months ended December 31, 2019 the Company sold 16,037 gold ounces (2018: 5,629 gold ounces which were produced after commercial production commenced on September 1, 2018) with an average realized gold price of \$1,471 (2018: \$1,210). Revenue is presented net of treatment and refining costs which were \$120 for the six months ended December 31, 2019 (2018: \$74).

Production costs are comprised of mining, processing, maintenance, site administration and site share-based compensation net of inventory changes and include write-downs of inventories due to net realizable value. As Moss Mine operations continue to progress measures are being taken to optimize production and reduce costs.

Depreciation and depletion was \$2,466 for the three months ended December 31, 2019 (2018: \$1,135) and \$5,766 for the six months ended December 31, 2019 (2018: \$1,313). Depletable mineral properties and most assets included in plant and equipment are depleted on a units of production basis over the life of the mine.

Royalties were \$679 for the three months ended December 31, 2019 (2018: \$365) and \$1,612 for the six months ended December 31, 2019 (2018: \$447). Increases in royalties is directly related to an increase in revenue. Refer to Note 6 of the Company's December 31, 2019 Condensed Interim Consolidated Financial Statements for details relating to the Company's royalty obligations.

#### **Corporate Administrative Expenses**

An increase in corporate administrative expenses of \$50 for the three months ended December 31, 2019, compared to the three months ended December 31, 2018, was due to an increase in share-based compensation relating to options granted in February 2019.

An increase in corporate administrative expenses of \$22 for the six months ended December 31, 2019, compared to the six months ended December 31, 2018, was due to an increase in share-based compensation relating to options granted in February 2019, which was mostly offset by a decrease in marketing and investor relations expenditure.

### Other Income (Expenses)

Finance costs consist of interest expense, finance costs relating to the silver streaming arrangement, changes in fair value to gold call options and derivatives and interest income.

A decrease in finance costs for the three months ended December 31, 2019 was due to a decrease in interest expense as the senior secured credit facility was fully repaid in December 2018, which was mostly offset by a non-cash fair value loss relating to the silver stream embedded derivative due to rising silver prices during the quarter.

An increase in finance costs for the six months ended December 31, 2019 was due to a non-cash fair value loss on the silver stream embedded derivative due to rising silver prices.

#### **Cash Flows**

Cash provided from operating activities during the six months ended December 31, 2019 was \$3,451 (2018: cash used: \$3,494) was primarily due to positive earnings from mine operations before depreciation and depletion which related to increased sales combine with higher metal prices compared to the previous year.

Cash used in financing activities during the six months ended December 31, 2019 was \$1,890 (2018: cash provided: \$9,341) and consisted of principal repayments of debt, interest on debt and principal repayments of equipment leases compared with completed financings in the previous year.

Cash used in investing activities during the six months ended December 31, 2019 was \$1,665 (2018: \$4,152) and consisted primarily of expenditures relating to the construction of a leach pad expansion and permitting activities relating to Phase III expansion onto unpatented claims compared with Mine construction payments in the previous year.

#### 6. Summary of Quarterly Results

	Three Months Ended December 31, 2019	Three Months Ended September 30, 2019	Three Months Ended June 30, 2019	Three Months Ended March 31, 2019	Three Months Ended December 31, 2018	Three Months Ended September 30, 2018	Three Months Ended June 30, 2018	Three Months Ended March 31, 2018
Revenue <sup>1</sup>	\$ 11,253	\$ 14,550	\$ 9,382	\$ 8,577	\$ 5,792	\$ 1,184	\$ -	\$ -
Operating income before depreciation and depletion	2,343	3,786	542	2,397	532	210	-	-
Loss for the period	(5,080)	(5,645)	(6,232)	(1,334)	(5,266)	(1,147)	(109)	(881)
Basic and diluted loss per share	(0.02)	(0.02)	(0.02)	(0.01)	(0.03)	(0.01)	(0.00)	(0.01)

<sup>&</sup>lt;sup>1</sup> As the Company was not in commercial production prior to September 1, 2018, there was no revenue recorded in periods prior to September 1, 2018.

Net loss decreased for the three months ended December 31, 2019 due to a decrease in non-cash fair value losses of \$650 and \$613 on derivatives and gold call options respectively, offset by a decrease in earnings from mine operations of \$486.

Net loss decreased for the three months ended September 30, 2019 due to an increase in earnings from mine operations of \$2,490 offset by non-cash fair value losses of \$2,931 and \$613 on derivatives and gold call options respectively.

Net loss increased for the three months ended June 30, 2019 due to non-cash fair value losses of \$1,588 and \$599 on derivatives and gold call options respectively. In addition, a decrease in earnings from mine operations of \$2,354 primarily resulted from a net realizable value write down of the heap pad inventory in the amount of \$3,034.

Net loss decreased for the three months ended March 31, 2019 due to non-cash fair value gains of \$487 and \$389 on derivatives and gold call options respectively, and a decrease of \$1,391 in interest expense due to the discharge of the senior secured credit facility with Sprott Private Resource Lending in the previous guarter.

Net loss increased for the three months ended December 31, 2018 due to a loss from mining operations of \$603, an increase in finance costs due to expensing \$1,100 in finance costs relating to the senior secured debt facility which was discharged during the period, a fair value loss of \$546 relating to a change in value in the Company's gold call options, and a non-cash fair value loss of \$551 relating to derivatives.

Net loss increased for the three months ended September 30, 2018 due to earnings from mining operations of \$32, an unrealized foreign exchange gain in the current quarter which was offset by an increase in borrowing costs as capitalization ceased upon the commencement of commercial production during the quarter.

Net loss decreased for the three months ended June 30, 2018 primarily due to a fair value gain of \$396 relating to a change in value in the Company's gold call options compared to a fair value loss of \$321 relating to the gold call options in the three months ended March 31, 2018.

Further information relating to factors which have caused period to period variations is included in the *Results of Operations* section of this MD&A.

## 7. Mine Permitting

The Company is fully permitted to operate an open pit, heap leach operation with gold and silver recovery on patented claims owned by the Company.

During the six months ended December 31, 2019 the Company's permitting efforts continued to be focused on the acquisition of federal permits required to expand mining, leaching and exploration operations beyond the patented claims onto adjacent federal lands administered by the Bureau of Land Management ("BLM"). During the current quarter efforts included the preparation of a draft Environmental Assessment ("EA") of the Company's MPO. The draft EA considered all of the public comments received, including comments received from a public scoping meeting, and BLM directions on alternatives to be considered. On December 12, 2019 the Draft EA was issued for a 30 day public comment period ending on January 12, 2020.

Approval of the MPO, including statutory requirements for public input and environmental assessment leading to a Finding of No Significant Impact ("FONSI") and a Decision Record is necessary for the Company to access, mine and process the entire mineral resource identified in the Preliminary Economic Assessment (technical report dated November 22, 2017). The Company expects the EA and subsequent FONSI will be completed by the end of the third fiscal quarter ended March 31, 2020. Should the Company not receive a FONSI and a Decision Record by March 31, 2020, which would enable operations to expand onto unpatented BLM land, it will impact operational efficiency and could lead to significantly curtailed mining operations due to current waste dump constraints on the Company's patented land.

#### 8. Exploration

During the quarter the Company completed a reverse circulation infill drilling program consisting of 29 holes totaling approximately 14,140 feet at the Moss Mine. The program was carried out within the western area of the Moss Mine, west of the current mining operations, to upgrade the Inferred resource to Measured & Indicated, and to expand the planned pit to the south and to depth.

Drilling testing included oxide gold mineralization within the Moss mineral resource and at depth beyond the current boundaries of the open pit. Most drill holes intercepted multiple thick zones of significant gold mineralization with several assays suggesting grades increase at depth and remain open. The drill results showed that the widespread stockwork mineralization continues westward beyond the current limits of the Moss resource. Past work in this direction has defined a 1.7 kilometer long trend of untested gold mineralization that comprise the following zones: West, Midwest and Far West Extensions with this trend being a top priority for resource expansion.

For further details, including the drilling results, see the Company's news release dated December 18, 2019.

## 9. Liquidity and Capital Resources

As at December 31, 2019, the Company had cash of \$3,328 (June 30, 2019: \$3,444). The decrease in cash compared to the year ended June 30, 2019 was primarily due to cash outflows relating to capital projects including construction of a leach pad expansion and principal and interest repayments, offset by positive earnings from mine operations before depreciation and depletion which were driven by increased sales and higher metal prices for the period.

During the six months ended December 31, 2019, working capital decreased by \$5,127 from a surplus to a deficit of \$4,186. The decrease in working capital was primarily due to an increase in the current portion of debt relating to a short term payment facility after 6,000 gold call options were exercised during the period and an increase in the current portion of the silver stream due to an expectation of an increase in silver deliveries for the next year.

The Company has taken measures to increase working capital subsequent to December 31, 2019 including agreeing to settle \$700 of principal and interest payments relating to the Gold Call Option Facility through the issuance of common shares. Ongoing liquidity needs will be funded from operating cash flows from production of the Moss Mine and future financings if required.

The Company is in compliance with externally imposed debt covenants relating to its debt facilities and lease obligations as at December 31, 2019.

#### **10. Subsequent Events**

Subsequent to December 31, 2019:

- The Company agreed to settle \$700 of principal and interest payments relating to the Gold call option facility through the issuance of 3,586,889 common shares at C\$0.253 per share.
- The Company granted 1,400,000 stock options to employees at an exercise price of C\$0.25 with a five year expiry period.
- 1,375,000 stock options of the Company with an exercise price of C\$0.25 expired.

### 11. Contractual Obligations

At December 31, 2019, the Company had the following contractual obligations outstanding:

	Within 1	2-3	4-5	5+	Total
	year	years	years	years	
Debt <sup>(1)</sup>	\$ 11,511	\$ 4,278	\$ -	\$ -	\$ 15,789
Trade and other payables	9,764	-	-	-	9,764
Lease commitments <sup>(2)</sup>	3,276	2,514	25	-	5,815
Provision for reclamation(3)	-	-	-	2,763	2,763
	\$ 24,551	\$ 6,792	\$ 25	\$ 2,763	\$ 34,131

<sup>(1)</sup> Includes interest due on convertible debenture and debt.

## 12. Off-Balance Sheet Arrangements

At the date of this MD&A, there were no off-balance sheet arrangements that have, or are reasonably likely to have, a current or future effect on the financial performance or financial condition of the Company.

<sup>(2)</sup> Includes lease obligation and operating lease commitments.

<sup>(3)</sup> Represents the undiscounted value of the reclamation provision.

## 13. Related Party Transactions

Related party transactions were incurred in the normal course of business and measured at their fair value as determined by management.

Related party balances are as follows:

	December 31,	December 31,
	2019	2018
Shared office expenses receivable	\$ 6	\$ 9
Consulting fees payable	\$ 8	\$ 8

Related party transactions are as follows:

		Three Months Ended					s Ended		
				Decen	nber 31,	Decer	December 31,		
	Note		2019		2018	2019	2018		
Consulting fees	(i)	\$	23	\$	172 <b>\$</b>	<b>46</b> \$	224		
Shared office recovery	(ii)	\$	(9)	\$	(10) \$	<b>(16)</b> \$	(27)		

- Consulting fees charged by companies controlled by certain directors of the Company are included in employee compensation and benefits expense, mineral properties, plant and equipment, and financing costs netted against debt.
- (ii) Shared office expenses charged to and from a company with directors in common are included in marketing and travel, and other general expenses.

#### **Commitments with Related Parties**

The Company has entered into a corporate services agreement with a related company for clerical, accounting, regulatory filing and geological services. The minimum monthly fee under the agreement is \$8 (C\$10) and renews annually.

### Debt with a significant shareholder

As at December 31, 2019, the Company has an outstanding convertible debenture with a significant shareholder. The facility can be converted into common shares at the holder's option.

Balances due to the significant shareholder are as follows:

	Dec	June 30,		
		2019		2019
Convertible debentures – 2018	\$	-	\$	5,961
Debt facility - 2019	\$	-	\$	2,973
Convertible debentures – 2019	\$	8,405	\$	-

Transactions with the significant shareholder are as follows:

	Three Months Ended			Six Months Ended		
		Decen	nber 31,	December 31,		
	2019		2018	2019	2018	
Principal repayments	\$ 500	\$	- \$	<b>500</b> \$	-	
Interest expense	287	-	253	562	439	

## 14. Key Management Personnel Compensation

The remuneration of the Company's directors and other key management personnel for the three and six months ended December 31, 2019 and 2018 is as follows:

	Three Months Ended December 31,				Six	Months Ended December 31,		
	2019		2018		2019		2018	
Salaries and short-term benefits	\$ 191	\$	189	\$	386	\$	376	
Share-based payments	\$ 111	\$	18	\$	231	\$	58	

#### **15. Conflicts of Interest**

The Company's directors and officers may serve as directors or officers, or may be associated with, other reporting companies, or have significant shareholdings in other public companies. To the extent that such other companies may participate in business or asset acquisitions, dispositions, or ventures in which the Company may participate, the directors and officers of the Company may have a conflict of interest in negotiating and concluding terms respecting the transaction. If a conflict of interest arises, the Company will follow the provisions of the Business Corporations Act (BC) ("Corporations Act") dealing with any conflict of interest. These provisions state that where a director has such a conflict, that director must, at a meeting of the Company's directors, disclose his or her interest and refrain from voting on the matter unless otherwise permitted by the Corporations Act. In accordance with the laws of the Province of British Columbia, the directors and officers of the Company are required to act honestly, in good faith and in the best interests of the Company.

#### 16. Proposed Transactions

As of the date of this MD&A, there were no proposed asset or business acquisitions or dispositions.

#### 17. Adoption of New Accounting Standards

Adoption of new accounting standards have been disclosed in Note 3 of the Company's Condensed Interim Consolidated Financial Statements for the three and six months ended December 31, 2019 and 2018.

## 18. Future Accounting Policy Changes Issued but not yet in Effect

Pronouncements that may have a significant impact to the Company have been included in the Company's Condensed Interim Consolidated Financial Statements for the three and six months ended December 31, 2019 and 2018.

## **19. Corporate Governance**

The Company's Board of Directors and its committees adhere to recommended corporate governance guidelines for public companies listed on the TSX-V to ensure transparency and accountability to shareholders. The current Board of Directors is comprised of seven individuals, five of whom are independent of management as they are neither executive officers nor employees of the Company. The Audit Committee is currently comprised of three directors who are independent of management.

The Audit Committee's role is to ensure the integrity of the Company's reported financial results through its review of the interim and audited annual Consolidated Financial Statements prior to their submission to the Board of Directors for approval. The Audit Committee meets with management quarterly to review the Consolidated Financial Statements, as well as the MD&A, and to discuss financial, operating and other matters.

## 20. Outstanding Share Data

The total number of outstanding common shares, stock options, and warrants as of the date of this MD&A are 250,712,792, 13,385,000 and 95,688,947 respectively.

### 21. Fair Value Measurements and Financial Risk Management

The carrying values of cash, trade and other receivables, and trade and other payables approximate their fair values due to the short-term nature of these instruments.

In evaluating fair value information, considerable judgment is required to interpret the market data used to develop the estimates. The use of different market assumptions and different valuation techniques may have a material effect on the estimated fair value amounts. Accordingly, the estimates of fair value presented herein may not be indicative of the amounts that could be realized in a current market exchange.

The Company classifies its financial instruments measured at fair value at one of three levels according to the relative reliability of the inputs used to estimate the fair value in the fair value hierarchy.

Level 1 – Unadjusted quoted prices in active markets for identical assets or liabilities.

Level 2 – Inputs other than quoted prices that are observable for the asset or liability either directly or indirectly.

Level 3 – Inputs that are not based on observable market data. The Company has no financial instruments classified in Level 3.

The Company's risk management policies are established to identify and analyze the risks faced by the Company, to set appropriate risk limits and controls and to monitor risks and adherence to market conditions and the Company's activities. The Company has exposure to credit risk, liquidity risk and market risk as a result of its use of financial instruments.

This note presents information about the Company's exposure to each of the above risks and the Company's objectives, policies and processes for measuring and managing these risks. Further quantitative disclosures are included throughout the consolidated financial statements. The Board of Directors has overall responsibility for the establishment and oversight of the Company's risk management framework. The Board of Directors has implemented and monitors compliance with risk management policies.

### (a) Credit risk

Credit risk is the risk of financial loss to the Company if a client or counterparty to a financial instrument fails to meet its contractual obligations. The Company has credit risk in respect of its cash, trade and other receivables, and reclamation deposits. The Company considers the risk of loss relating to cash and reclamation deposits to be low because these instruments are held only with a Canadian Schedule I financial institution, a US-chartered commercial bank and a US government agency. Accounts receivable at December 31, 2019 related primarily to value-added taxes which is expected to be collectible in full due to the nature of the counterparties and previous history of collectability.

### (b) Liquidity risk

Liquidity risk is the risk that the Company will incur difficulties meeting its financial obligations as they are due. The Company's approach to managing liquidity is to ensure, as far as possible, that it will have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions without incurring unacceptable losses or risking harm to the Company's reputation. A summary of contractual maturities of financial liabilities in included in Note 24 of the Company's Condensed Interim Consolidated Financial Statements for the three and six months ended December 31, 2019 and 2018.

The Company manages its liquidity risk through the preparation of budgets and forecasts, which are regularly monitored and updated as management considers necessary and through the Company's capital management activities.

## (c) Market risk

Market risk consists of currency risk, commodity price risk and interest rate risk. The objective of market risk management is to manage and control market risk exposures within acceptable limits while maximizing returns.

### (i) Currency risk

Foreign currency exchange rate risk is the risk that the fair values or future cash flows of the Company's financial instruments will fluctuate as a result of changes in foreign exchange rates. Some of the Company's operating and corporate administration expenditures are incurred in Canadian dollars and the fluctuation of the USD in relation to CAD will have an impact on the Company's profitability and the Company's financial assets and liabilities. The Company has assessed the impact to be low. The Company has not entered into any formal arrangements to hedge currency risk but does maintain cash balances within each currency.

## (ii) Commodity price risk

The Company is subject to commodity price risk from fluctuations in the market prices for gold and silver. Commodity price risks are affected by many factors that are outside the Company's control including global or regional consumption patterns, the supply of and demand for metals, speculative activities, the availability and costs of metal substitutes, inflation and political and economic conditions.

The value of the silver stream embedded derivative will fluctuate with changes in the price of silver which will affect future earnings. Management closely monitors trends in commodity prices of gold and other precious and base metals as part of its routine activities, as these trends could significantly impact future cash flows.

#### (iii) Interest rate risk

Interest rate risk is the risk that the fair values or future cash flows of the Company's financial instruments will fluctuate as a result of changes in market interest rates. I Interest rate risk arises from the interest rate impact on cash, which are held at variable market rates, and is exposed to interest rate risk on its outstanding borrowings. With other variables unchanged, a 1% increase on the Company's floating rate date would increase annual interest expense by \$33. The Company closely monitors its exposure to interest rate risk and has not entered into any derivative contracts to manage this risk.

#### 22. Risks and Uncertainties

The Company is in the business of acquiring, developing and operating mineral properties. It is exposed to a number of risks and uncertainties that are common to other mining companies. The industry is capital intensive at all stages and is subject to variations in commodity prices, market sentiment, exchange rates for currency, inflation and other risks.

The risks and uncertainties described in this section are not inclusive of all the risks and uncertainties to which the Company may be subject.

#### **Need for Additional Funds**

The Company has no history of profitable operations and is subject to many risks common to other companies in the same business, including under-capitalization and resource limitations. The Company may require additional capital to continue the operations of the Moss Mine or to continue as a going concern. There can be no assurance that such capital will be available or, if available, will be on reasonable terms.

### **Exploration and Development**

Exploration for and development of gold properties involves significant financial risks which even a combination of careful evaluation, experience and knowledge may not eliminate. While the discovery of an ore body may result in substantial rewards, few properties which are explored are ultimately developed into producing mines. Major expenses may be required to establish mineral reserves by drilling, constructing mining and processing facilities at a site, developing metallurgical processes and extracting gold from ore. We cannot ensure that our current exploration and development programs will result in profitable commercial mining operations.

The economic feasibility of the mine is based upon many factors, including the accuracy of mineral resource and mineral reserve estimates; metallurgical recoveries; capital and operating costs; government regulations relating to prices, taxes, royalties, land tenure, land use, importing and exporting and environmental management and protection; and gold

prices, which are highly volatile. Development projects are also subject to the successful completion of feasibility studies, issuance of necessary governmental permits and availability of adequate financing.

### **Metal Prices**

The mining industry, in general, is intensely competitive and there is no assurance that a profitable market will exist for the sale of metals produced even if commercial quantities of precious and/or base metals are discovered. Factors beyond the control of the Company may affect the marketability of metals discovered. Pricing is affected by numerous factors beyond the Company's control, such as international economic and political trends, global or regional consumption and demand patterns, increased production and smelter availability. There is no assurance that the price of metals recovered from any mineral deposit will be such that they can be mined at a profit.

#### **Title Risks**

The Company has taken steps to verify title to mining interests in which it has or is in the process of earning an interest in, including review of condition of title reports, vesting deeds, mining claim location notices and filings, and property tax and other public records and is not presently aware of any title defects. The procedures the Company has undertaken and may undertake in the future to verify title provide no assurance that the underlying properties are not subject to prior agreements or transfers of which the Company is unaware.

### **Environmental Regulations, Permits and Licenses**

The current operations of the Company require permits from various federal and state authorities and such operations are subject to laws and regulations governing prospecting, exploration, development, mining, production, exports, taxes, labour standards, occupational health, waste disposal, toxic substances, land use, environmental, mine safety and other matters. Environmental legislation in the State of Arizona provides restrictions and prohibition on spills, releases or emissions of various substances produced in association with certain mining industry operations, such as seepage from process ponds, which would result in environmental pollution. A breach of such legislation may result in imposition of fines and penalties. In addition, certain types of operations require the submission and approval of environmental impact statements. Environmental legislation is evolving in a direction of stricter standards and enforcement and higher fines and penalties for non-compliance. Environmental assessments of proposed projects carry a heightened degree of responsibility for companies, directors, officers and employees. The cost of compliance with changes in governmental regulations has the potential to reduce the profitability of operations. The Company intends to fully comply with all environmental regulations.

The Company believes that it is in substantial compliance with all material laws and regulation which currently apply to its activities. There can be no assurance that all permits which the Company may require for its exploration activities and operations will be obtainable on reasonable terms or on a timely basis or that such laws and regulations would not have an adverse effect on any mining project which the Company might undertake.

## **Taxation Risk**

Due to the complexity and nature of the Company's operations various income tax positions are required to be taken. No assurance can be given that applicable tax authorities will not issue a reassessment or challenge these positions.

#### **Competition and Agreements with Other Parties**

The mining industry is intensely competitive in all its phases and the Company competes with other companies that have greater financial resources and technical capacity. Competition could adversely affect the Company's ability to acquire suitable properties or prospects in the future.

The Company may, in the future, be unable to meet its share of costs incurred under such agreements to which it is party and it may have its interest in the properties subject to such agreements reduced as a result. Also, if other parties to such agreements do not meet their share of such costs, the Company may not be able to finance the expenditures required to complete recommended programs.

# **Economic Conditions**

Unfavourable economic conditions may negatively impact the Company's financial viability. Unfavourable economic conditions could also increase the Company's financing costs, decrease net income or increase net loss, limit access to capital markets and negatively impact the availability of credit facilities to the Company.

### **Dependence on Management**

The Company is very dependent upon the personal efforts and commitment of its existing management. To the extent that management's services would be unavailable for any reason, a disruption to the operations of the Company could result and other persons would be required to manage and operate the Company.

#### 23. Disclosure Controls and Procedures and Internal Controls Over Financial Reporting

Management is responsible for the preparation and integrity of the Financial Statements and maintains appropriate information systems, procedures and controls to ensure that information used internally and disclosed externally is complete and reliable.

Management is also responsible for the design of the Company's internal controls over financial reporting in order to provide reasonable assurance regarding the reliability of financial reporting and the preparation of Financial Statements for external purposes in accordance with IFRS.

Readers are cautioned that the Company is not required to certify the design and evaluation of its disclosure controls and procedures and internal controls over financial reporting and has not completed such an evaluation. The inherent limitations on the ability of the Company's certifying officers to design and implement on a cost-effective basis disclosure controls and procedures and internal controls over financial reporting for the Company may result in additional risks to the quality, reliability, transparency and timeliness of interim and annual filings and other reports provided under securities legislation.

#### 24. Cautionary Note Regarding Forward-Looking Information

The Company's condensed interim consolidated financial statements and this accompanying MD&A contain statements that constitute "forward-looking statements" within the meaning of National Instrument 51-102, Continuous Disclosure Obligations of the Canadian Securities Administrators. Forward-looking statements often, but not always, are identified by the use of words such as "seek", "anticipate", "believe", "plan", "estimate", "expect", "targeting" and "intend" and statements that an event or result "may", "will", "should", "could", or "might" occur or be achieved and other similar expressions. Forward-looking statements in this MD&A include but are not limited to statements regarding the Company's future exploration and development plans and expenditures, the satisfaction of rights and performance of obligations under agreements to which the Company is a party, the ability of the Company to hire and retain employees and consultants and estimated administrative and other expenditures. The forward-looking statements that are contained in this MD&A involve a number of risks and uncertainties. As a consequence, actual results might differ materially from results forecast or suggested in these forward-looking statements. Some of these risks and uncertainties are identified under the heading "RISKS AND UNCERTAINTIES" in this MD&A. Additional information regarding these factors and other important factors that could cause results to differ materially may be referred to as part of particular forward-looking statements. The forward-looking statements are qualified in their entirety by reference to the important factors discussed under the heading "RISKS AND UNCERTAINTIES" and to those that may be discussed as part of particular forward-looking statements. Forward-looking statements involve known and unknown risks, uncertainties, assumptions and other factors that may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Factors that could cause the actual results to differ include market prices, exploration success, continued availability of capital and financing, inability to obtain required regulatory approvals and general market conditions. These statements are based on a number of assumptions, including assumptions regarding general market conditions, the timing and receipt of regulatory approvals, the ability of the Company and other relevant parties to satisfy regulatory requirements, the availability of financing for proposed transactions and programs on reasonable terms and the ability of third-party service providers to deliver services in a timely manner. Forward-looking statements contained herein are made as of the date of this MD&A 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 may be required by law. If the Company does update one or more forward-looking statements, no inference should be drawn that it will make additional updates with respect to those or other forward-looking statements. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements.

# 25. Approval

The Board of Directors of the Company has approved the disclosure contained in this MD&A.

## 26. Additional Information

Additional information related to the Company can be found on SEDAR at www.sedar.com and on the Company's website at www.northernvertex.com.