Vertex Resource Group Ltd.

Management's Discussion and Analysis

For the three and twelve months ended December 31, 2019 and 2018

The following Management's Discussion and Analysis ("MD&A") is dated June 9, 2020, and is a discussion of the consolidated financial position and results of Vertex Resource Group Ltd. ("Vertex" or the "Company") for the three and twelve months ended December 31, 2019 and 2018, and should be read together with Vertex's annual audited consolidated financial statements and accompanying notes (the "Annual Financial Statements") for the year ended December 31, 2019, and the Annual Information Form ("AIF") for the same year filed on the Company's SEDAR profile at www.sedar.com. All dollar amounts in this MD&A are in thousands of Canadian dollars, except per share amounts or unless otherwise stated.

This MD&A, the Annual Financial Statements and 2018 comparative information have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"), which are also Generally Accepted Accounting Principles ("GAAP") for publicly accountable enterprises in Canada. This MD&A contains forward looking information and reference should be made to Section 8.0 Forward-Looking Information.

1.0 Executive Overview

Vertex is a TSX Venture Exchange publicly traded environmental services company providing industry leading solutions to a diverse range of clients across Canada and within select regions of the United States. Vertex helps its clients achieve their developmental and operational goals through a versatile suite of integrated services. From initial site selection, consultation, and regulatory approval, through the construction, operation and maintenance phases, to conclusion and environmental cleanup, Vertex offers services throughout the life cycle of its clients' projects. The Company services a wide array of high-quality customers operating in numerous industries, and Vertex trades under the symbol "VTX".

The Company provides services in western Canada where the level of operating activity is influenced by seasonal weather patterns. Certain project sites are located in remote areas that are inaccessible other than during the winter months as the ground surrounding the project sites makes the area inaccessible during warmer seasons. Seasonal factors and unexpected weather patterns may lead to declines in the demand for the services of the Company. Wet weather and the spring thaw can make the ground unstable; consequently, municipalities and provincial transportation authorities enforce road bans that restrict movement of vehicles and other heavy equipment, thereby reducing activity levels.

The Company has two reportable segments:

Environmental Consulting

Through Vertex's Environmental Consulting segment, the Company provides a variety of services related to assisting its clients to meet internal environmental standards, environmental legislation, and related environmental compliance requirements. These services span multiple industries including energy, mining, utilities, forestry, private development, public infrastructure, telecommunications, and government. More specifically, these services include environmental planning and regulatory approvals, reclamation, remediation, groundwater monitoring, abandonment, drilling and completion engineering and emergency spill response.

Environmental Services

Through Vertex's Environmental Services segment, the Company provides a variety of services related to transportation, removal, storage, disposal of materials, and maintenance of facilities in an environmentally safe manner. Services include fluid hauling, equipment rentals, hydrovac services, well site services, and industrial cleaning for various industries including energy, telecommunications, public sector, utilities, mining, and agriculture.

2.0 Fourth Quarter Operational and Financial Highlights

The results for the fourth quarter of 2019 were below management's expectations reflecting challenges in the face of volatility with its customers' spending in the energy industry as a result of continued production curtailment. Consistent customer spending and solid projects had positive impacts on Vertex's Environmental Consulting segment's results, which were offset by revenue reductions in the Environmental Services segment.

- Revenue decreased by $5.9 million to $40.7 million, down 12.7% in the fourth quarter of 2019 from $46.6 million for the same quarter in 2018. Increases in the Environmental Consulting segment resulting from increased market share and a secure backlog of projects were offset by decreases in the Environmental Services segment due to customers delaying spending into the first quarter of 2020 and continued competition for available projects.

- Gross profit for the fourth quarter of 2019 was $9.0 million, down 24.7% or $3.0 million from $12.0 million in the same quarter of 2018 due to pressure on input costs and increased competition for project opportunities. Gross profit as a percentage of revenue ("gross profit margin") dropped to 22.3% in the fourth quarter of 2019 versus 25.8% in the fourth quarter of 2018.

- General and administrative costs ("G&A") decreased by 24.7% or $1.5 million to $4.6 million in the fourth quarter of 2019, from $6.1 million in the fourth quarter of 2018. Vertex continues to streamline operations and aggressively manage G&A costs.

- Adjusted EBITDA (see "Adjusted EBITDA" definition in Section 3.2 – Adjusted EBITDA) for the fourth quarter decreased by $1.4 million or 24.7% to $4.5 million compared to same quarter in 2018. This decrease was driven by revenue shortfall and lower gross margin.

- Depreciation and amortization expense decreased by 12.8% or $0.8 million from $5.9 million in the fourth quarter of 2018 to $5.1 million in the fourth quarter of 2019. Depreciation of ROU assets during the quarter was $1.2 million. Finance costs increased by $0.2 million, from $1.3 million in 2018 to $1.5 million for the fourth quarter of 2019, due to the recognition of $0.3 million interest accretion on lease liabilities offset with a reduction of $0.1 million of other finance costs.

- Impairment expense of $6.7 million was recorded during the quarter. $6.0 million was the result of applying the annual impairment tests of goodwill to the Company's cash generating units. $0.7 million was the result of evaluating certain ROU assets as their continued value to the Company was deemed to be nil.

- Net results for the fourth quarter of 2019 increased by $9.3 million, to a loss of $8.9 million, from income of $0.4 million in the fourth quarter of 2018.

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	Three months ended December 31, 2019	2018
Revenue	**40,664**	46,582
Direct costs	**31,607**	34,552
Gross profit	**9,057**	12,030
General and administrative expenses	**4,585**	6,092
Share-based compensation	**46**	54
Depreciation and amortization	**5,139**	5,893
Depreciation of right of use assets	**1,161**	-
Finance costs	**1,497**	1,341
Impairment	**6,749**	-
Gain on bargain purchase	**-**	(1,037)
(Loss) income before income taxes	**(10,120)**	(313)
Income tax recovery	**(1,249)**	(743)
Net (loss) income and comprehensive (loss) income for the period	**(8,871)**	430

	Three months ended December 31, 2019	2018
Net (loss) income and comprehensive (loss) income for the period	**(8,871)**	430
Add:		
Income tax recovery	**(1,249)**	(743)
Gain on bargain purchase	**-**	(1,037)
Finance costs	**1,497**	1,341
Impairment	**6,749**	-
Depreciation and amortization	**5,139**	5,893
Depreciation of right of use assets	**1,161**	-
Share-based compensation	**46**	54
Adjusted EBITDA (1)	**4,472**	5,938
Environmental Consulting	**2,089**	2,190
Environmental Services	**3,874**	4,762
Other	**(1,491)**	(1,014)
	4,472	5,938

(1) See Adjusted EBITDA Non-IFRS measure definition Section 3.2.

Further highlights, in addition to the above, for the fourth quarter by segment are as follows:

- Revenue decreased by $5.9 million to $40.7 million, down 12.7% in the fourth quarter of 2019 from $46.6 million for the same quarter in 2018. In the Environmental Consulting segment, revenue in the fourth quarter of 2019, increased by $1.0 million to $12.6 up by 8.2%, from $11.6 million in fourth quarter of 2018, due to consistent customer spending related to addressing their environmental liabilities. Vertex continues to focus on cross-selling strategies for customers throughout different industries in an effort to drive revenues and improve the utilization of Vertex's people and equipment. The Environmental Services segment's revenue decreased by 13.4% or $4.1 million to $26.3 million in the fourth quarter of 2019 from $30.4 million in the fourth quarter of 2018. This was the result of customers cancelling or postponing projects as well as guarded customer spending in the quarter.

- Adjusted EBITDA for the fourth quarter decreased by 24.7% or $1.4 million to $4.5 million in fourth quarter of 2019 from $5.9 million in fourth quarter of 2018. Adjusted EBITDA for the Environmental Consulting segment in the fourth quarter decreased by 4.6% or $0.1 million, to $2.1 million in the fourth quarter of 2019 from $2.2 million in the fourth quarter of 2018, due to the mix of revenue relative to the service lines within the segment. Adjusted EBITDA for the Environmental Services segment in the fourth quarter of 2019 decreased by 18.6% or $0.9 million, to $3.9 million in the fourth quarter of 2019 from $4.8 million in the fourth quarter of 2018 due to decreased revenue within this segment.

- Adjusted EBITDA for the fourth quarter, as a percentage of revenue, decreased to 11.0% in the fourth quarter of 2019 compared to 12.7% in the fourth quarter of 2018, as revenue shortfalls and margin pressures were not overcome.

3.0 Annual Operational and Financial Highlights

For three consecutive years, Vertex has increased year over year revenue and Adjusted EBITDA through organic growth and strategic acquisitions. In the energy sector, limitations on oil and gas egress capacity has had an adverse impact on gross margins due to the resulting price spread between WTI and WCS. In response to this, in an effort to increase prices, production curtailments were implemented in Alberta for 2019, which resulted in reduced drilling activity and lower production by E&P companies; with the further result of pricing pressure on certain services provided by Vertex. However, the Company continues to focus on diversifying its business to sectors outside of oil and gas. Vertex successfully completed three complementary and opportunistic acquisitions during 2018 and refinanced its debt at a lower cost of borrowing which have contributed positively to the results for 2019 notwithstanding the negative factors in the energy industry. In 2019, Vertex continued to integrate equipment and operations from its acquisitions through cross-selling opportunities across service lines, continued geographical and industry expansion, as well as reducing redundant costs where possible. Vertex will continue to focus on efficiently managing the costs of the business and diversifying its services, product offerings and customer base both in geography and industry. These efforts should serve to support performance and the financial position of the Company to mitigate the effects of the COVID-19 pandemic.

Revenue and Adjusted EBITDA improved while gross profit, and net (loss) income decreased in 2019 as compared to 2018, as highlighted below:

- Revenue increased to $168.0 million, up 11.8% or $17.6 million from 2018. Increased revenue is attributable to improved market share in certain business lines, the impact of incorporating the results of 2018 acquisitions for a full fiscal year of 2019, and consistent customer spending in certain segments including environmental liability management, transaction assessments, and decommissioning.

- Gross profit decreased to $39.3 million, down 3.0% or $1.2 million from 2018 due to reduced pricing from production curtailment, shifting revenue sources and increased input costs required to generate revenue. Vertex's gross profit margin in 2019 was 23.4% compared to 26.9% in 2018.

- G&A decreased by 14.6% or $2.9 million to $17.0 million for 2019, from $19.9 million in 2018. As a percentage of revenue, G&A decreased to 10.1% in 2019 compared to 13.2% in 2018. The adoption of IFRS 16 – Leases resulted in a decrease of $4.7 million of costs previously classified as rent that are now being expensed as depreciation of right of use assets and interest accretion.

- Adjusted EBITDA was $22.3 million in 2019, up 8.2% or $1.7 million from 2018. This increase was driven by the impact of IFRS 16.
- Impairment expense of $6.7 million was recorded in the fourth quarter of 2019 based on the result of the annual goodwill impairment test and related guidance required under the accounting standards which requires a Company to evaluate the ongoing value of goodwill relative to the direction of future operations.
- Vertex's net (loss) income and comprehensive (loss) income reported for 2019 was negatively affected by the $6.7 million impairment expense. Net loss for 2019 was $11.3 million compared to net income of $2.3 million in 2018. Results for 2018 were positively impacted by a $7.8 million gain on acquisition offset by $4.1 million in refinancing costs. Loss per share was $0.12 compared to income per share of $0.03 in 2018.
- Cash provided by operating activities increased by $12.9 million to $22.2 million for 2019, from cash provided by operating activities of $9.3 million in 2018. A majority of this increase in cash provided from operating activities was due to the collection of working capital and the positive impact of IFRS 16.

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3.1 Annual Select Financial Information

	2019	2018	2017
Revenue	**168,070**	150,385	118,419
Direct costs	**128,778**	109,892	86,116
Gross profit	**39,292**	40,493	32,303
General and administrative expenses	**16,986**	19,884	16,771
Share-based compensation	**188**	194	5
Depreciation and amortization	**18,429**	17,882	13,641
Depreciation of right of use assets	**4,417**	-	-
Finance costs	**5,988**	9,181	6,493
Impairment	**6,749**	-	-
Gain on bargain purchase	**-**	(7,862)	(922)
(Loss) income before income taxes	**(13,465)**	1,214	(3,685)
Income tax recovery	**(2,151)**	(1,077)	(737)
Net (loss) income and comprehensive (loss) income for the year	**(11,314)**	2,291	(2,948)
Net (loss) income per share			
Basic and diluted	**(0.12)**	0.03	(0.04)
Weighted average number of shares outstanding for the purpose of calculating earnings per share			
Basic and diluted	**91,253,115**	89,837,995	76,501,608

	December 31,		
	2019	2018	2017
Total assets	**171,918**	184,821	144,156
Total loans and borrowings and secured lease liabilities, less cash	**78,461**	85,258	61,864

3.2 Adjusted EBITDA

	2019	2018
Net (loss) income and comprehensive (loss) income for the year	**(11,314)**	2,291
Add:		
Income tax recovery	**(2,151)**	(1,077)
Gain on bargain purchase	**-**	(7,862)
Finance costs	**5,988**	9,181
Impairment	**6,749**	-
Depreciation and amortization	**18,429**	17,882
Depreciation of right of use assets	**4,417**	-
Share-based compensation	**188**	194
Adjusted EBITDA (1)	**22,306**	20,609
Environmental Consulting	**6,995**	6,306
Environmental Services	**20,618**	15,576
Other	**(5,307)**	(1,273)
	22,306	20,609

(1) "Adjusted EBITDA" is a non-IFRS financial measure which is calculated by adjusting net (loss) income for the sum of income taxes, finance costs including interest accretion on lease liabilities, gain on bargain purchase, depreciation of property and equipment and right of use assets, amortization of intangible assets, share-based compensation, and impairment. The Company uses Adjusted EBITDA as an indicator of its principal business activities operational performance prior to consideration of how its activities are financed and the impact of taxation, non-cash depreciation and amortization, and other non-cash expenses such as impairment required under IFRS. Adjusted EBITDA does not have a standardized meaning prescribed by IFRS and is not necessarily comparable to similar measures provided by other companies. Adjusted EBITDA is used by many analysts as important analytical tool and management of Vertex believes it is useful for providing readers with additional clarity on Vertex's operational performance. This measure is also considered important by the Company's lenders in determining compliance by the Company with the financial covenants under its lending arrangements.

4.0 Outlook

Earlier in 2020 optimism existed for improvement in the Western Canadian economy from the low levels experienced in 2019 based on expectations for increased spending on a number of major projects. However, the advent of the COVID-19 virus has resulted in significant uncertainties and reduced revenue and earnings outlooks for 2020 across all sectors. In the energy industry, oil companies have announced reductions in capital expenditure budgets and both upstream and downstream production activities.

In an attempt to limit and contain the spread of COVID-19, countries and governments around the world implemented heavy restrictions on social interaction, public gatherings, travel, and business activities to limit and contain the spread of COVID-19. This resulted in concerns over supply chain disruptions, reduced demand for many products and services, and, overall, a severe contraction of economic activity. Various jurisdictions are currently starting to relax restrictions and re-open business activities in a controlled and measured manner. This may ease concerns over the global demand for products and services. However, a return to normalcy in business activities is not expected for an extended period of time. Expectations and business activity may be tempered by the possibility of additional waves of COVID-19.

While demand in many sectors has been adversely impacted, Vertex's services are considered essential and the Company has been able to continue providing its services to clients. To facilitate this, Vertex has implemented appropriate safety measures pertaining to physical distancing, travel, sanitization, personal protective equipment and supplies, and work from home arrangements.

While it is not possible to quantify the full effect of the economic uncertainties and financial impacts of COVID-19, Vertex expects that there will be continued pressure on its revenues and gross margins into the second quarter of 2020, perhaps beyond, especially in the upstream sector of the energy industry. As of this date, Vertex has seen some increased demand for its rental products related to storage and accommodations, stable fluid hauling demand, and increased opportunities for environmental remediation services. It is not known whether these positive circumstances will continue.

Vertex generates significant revenues from sectors outside of oil and gas including midstream, utilities, industrial construction, mining, public sector, agriculture, and forestry. These sectors accounted for 43% of the company's revenues in 2019. Within the oil and gas sector, 77% of revenues were derived from operations and maintenance (O&M) and reclamation related services, with the remaining 23% coming from development and drilling related services. From all sectors, approximately 69% of the Company's revenues were derived from operations and maintenance (O&M) related services, 10% from environmental reclamation, 13% from development, and 8% from upstream drilling services.

Vertex maintains a diversified business consisting of various revenue streams including: environmental consulting, testing, and remediation; fluid hauling for upstream, midstream, mining, and agricultural sectors; hydrovac for construction; industrial cleaning and waste disposal; equipment rental for storage and containment of products and waste; manufacturing of acoustic products and metal buildings.

The Company has acted expeditiously to curtail discretionary expenditures, carefully manage operating costs, reduce labour costs, and re-assess planned capital expenditures.

It is important to note that Canada, as a country, is highly dependent on the energy sector. In 2018, the oil and gas extraction sector alone generated higher real GDP than the entire manufacturing sector of the province of Ontario. To date the federal government of Canada has provided major funding to support businesses in the form of liquidity loans to mid-market companies, bridge financing for large companies to support continuing operations, wage cost subsidies, and major funding for environmental remediation activities specifically for Alberta, Saskatchewan, and British Columbia. The Company has extensive expertise in environmental remediation and expects to benefit significantly from the available funding. Vertex has aggressively and successfully pursued available subsidies, loans, and funding opportunities and intends to continue doing so.

There is significant optimism for future growth in Western Canada based on: progress on the Trans Mountain, Line 3 Replacement, Coastal Gas Link, and Keystone pipelines; LNG plant developments; and proposed petrochemical plants.

During 2020, Vertex intends to closely monitor developments and employ ongoing forecasting to ensure efficient adaptation to changing economics. Vertex will also continue to focus on controlled capital expenditures, efficient use of assets, and strategic repairs and maintenance programs to obtain maximum economic value from its existing complement of assets.

5.0 Results from Operations

5.1 Revenue

The following table sets forth revenue by reportable operating segments for the following periods:

	Years ended December 31, 2019	2018	Variance $	%
Environmental Consulting	**45,860**	35,559	**10,301**	29.0%
Environmental Services	**113,885**	86,508	**27,377**	31.6%
Other	**8,325**	28,318	**(19,993)**	-70.6%
Consolidated revenue	**168,070**	150,385	**17,685**	11.8%

Revenue increased by 11.8% or $17.6 million to $168.0 million during year ended December 31, 2019, from $150.4 million during the year ended December 31, 2018.

Revenue increased by 29.0% or $10.3 million in the Environmental Consulting segment to $45.9 million in 2019 from $35.6 million in 2018. The increased revenues were a result of Vertex successfully growing new customers across all industries and the successful cross-selling of its suite of services to its existing customer base. These gains in revenue were achieved in spite of inclement weather negatively impacting operating in the second and third quarters.

Revenue increased by 31.6% or $27.4 million in the Environmental Services segment to $113.9 million in 2019 from $86.5 million in 2018. Revenue increased primarily as a result of inclusion of a full year of 2018 acquisition revenue versus one half of a year due to the timing of the 2018 acquisitions.

5.2 Gross Profit

	Years ended December 31, 2019	2018	Variance $	%
Gross profit	**39,292**	40,493	**-1,201**	-3.0%
Gross profit as a % of revenue	**23.4%**	26.9%	**-3.5%**	-13.2%

(1) Gross profit is comprised of gross profit before depreciation.

Gross profit for the year decreased by 3.0% or $1.2 million to $39.3 million in 2019 from $40.5 million in 2018. Gross profit margins decreased to 23.4% for 2019 compared to 26.9% for 2018, due to the effects of production curtailment in upstream oil and gas and changing revenue mix resulting from expansion into non-energy sectors.

5.3 General and Administrative Expenses (G&A)

	Years ended December 31,		Variance	
	2019	2018	$	%
G&A	**16,986**	19,884	**(2,898)**	-14.6%
G&A as a % of revenue	**10.1%**	13.2%	**-3.1%**	-23.6%

G&A decreased by 3.1% or $2.9 million, to $17.0 million in 2019 from $19.9 million in 2018. Excluding the $4.7 million impact of adopting IFRS 16, G&A increased by $1.8 million. This resulted primarily from the inclusion of a full year of expenses from 2018 acquisitions notwithstanding synergistic reductions. G&A, as a percentage of revenue, improved to 10.1% (12.9% excluding the impact of IFRS 16) in 2019 versus 13.2% in 2018.

5.4 Adjusted EBITDA

	Years ended December 31,		Variance	
	2019	2018	$	%
Environmental Consulting	**6,995**	6,306	**689**	10.9%
Environmental Services	**20,618**	15,576	**5,042**	32.4%
Other	**(5,307)**	(1,273)	**(4,034)**	316.9%
	22,306	20,609	**1,697**	8.2%
Adjusted EBITDA(1) as a % of revenue	**13.3%**	13.7%	**-0.4%**	-3.2%

(1) See Adjusted EBITDA definition Section 3.2.

Adjusted EBITDA increased by 8.2% or $1.7 million to $22.3 million in 2019 from $20.6 million in 2018. Adjusted EBITDA increased by $0.7 million in the Environmental Consulting segment due to organic growth and $5.0 million in the Environmental Services segment due to revenue growth from 2018 acquisitions. This was offset by a decrease of $4.0 million in the "Other" segments.

Adjusted EBITDA increased by 10.9% or $0.7 million in the Environmental Consulting segment to $7.0 million in 2019 from $6.3 million in 2018. Increased revenue and efficient project management had a positive impact on this segment.

Adjusted EBITDA increased by 32.4% or $5.0 million in the Environmental Services segment to $20.6 million in 2019 from $15.6 million in 2018 due to the combination of increased revenue and G&A reductions.

Adjusted EBITDA for the year, as a percentage of revenue, was 13.3% in 2019 compared to 13.7% in 2018.

5.5 Other Items

	Years ended December 31, 2019	2018	Variance $	%
Depreciation and amortization	**18,429**	17,882	**547**	3.1%
Finance costs	**5,988**	9,181	**(3,193)**	-34.8%
Impairment	**6,749**	-	**6,749**	-
Depreciation of right of use assets	**4,417**	-	**4,417**	-
Gain on bargain purchase	**-**	(7,862)	**7,862**	-100.0%
Share-based compensation	**188**	194	**(6)**	-3.1%
Total	**35,771**	19,395	**16,376**	84.4%

Depreciation and amortization increased by 3.1% or $0.5 million to $18.4 million for 2019 from $17.9 million in 2018. The increase is due to the 2018 acquisitions which included a large amount of property and equipment.

Finance costs decreased by $3.2 million in 2019 primarily as a result of a one-time refinancing cost of $3.6 million related to Vertex's credit facilities. Included in finance costs for 2019 is $1.5 million of accretion interest related to lease liabilities under IFRS 16 (nil for 2018 as IFRS 16 was not in effect).

Impairment has been recorded based on the results of an annual impairment test of goodwill and the application of IFRS 16 – Leases. The recoverable amount of the rental CGU based on the impairment test was below the carrying value of the assets resulting in an impairment charge of $6.0 million versus nil in 2018. In addition, management determined that some of the right of use assets related to facility leases no longer had value to the Company, which resulted in an impairment charge of $0.7 million.

Depreciation of right of use assets of $4.4 million is the result of adopting IFRS 16 – Leases which converts rent expense on facilities and equipment contracts into depreciation and interest accretion.

In 2018 the Company realized a total of $7.9 million in gain on bargain purchase from the three acquisitions completed in 2018.

5.6 Net (Loss) Income and Comprehensive (Loss) Income for the Year

	Years ended December 31, 2019	2018	Variance $	%
Net income (loss) and comprehensive income (loss) for the year	**(11,314)**	2,291	**(13,605)**	593.8%

Net (loss) income for the year increased by $13.6 million to a loss of $11.3 million in 2019 from income of $2.3 million in 2018. The 2019 loss includes the impairment charge of $6.7 million. The 2018 income includes the gain on bargain purchase of $7.9 million offset by one-time refinancing costs of $3.6 million.

5.7 Summary of Quarterly Results

($000 except per share amounts)	2019				2018			
	31-Dec	30-Sep	30-Jun	31-Mar	31-Dec	30-Sep	30-Jun	31-Mar
Revenue	**40,664**	43,655	41,123	42,628	46,582	41,425	27,692	34,686
Net (loss) income	**(8,871)**	(552)	(1,268)	(623)	430	6,506	(4,178)	(467)
Basic and diluted (loss) income per share	**(0.10)**	0.00	(0.01)	(0.01)	0.01	0.07	(0.05)	(0.12)
Adjusted EBITDA[(1)]	**4,472**	6,475	5,333	6,026	5,938	6,076	4,258	4,337

(1) See Adjusted EBITDA definition Section 3.2.

(2) See note below.

With the exception of the fourth quarter of 2019, over past quarters, Vertex continued to expand its service offerings over multiple industries and geographical locations and exit service lines that do not improve the bottom line. This focus is a result of lessons learned in prior years as the Company continues to cross sell services with its people and equipment to drive utilization producing improved gross profit margins for the Company and its shareholders.

Vertex's operating and financial performance hit a bump in the fourth quarter of 2019 as the majority of service lines experienced a contraction of opportunities beginning at the level of revenue. While pockets of the business continued to experience growth and profitability, those service lines were offset by others that achieved results that were lower than expected. Some of the service lines have been negatively impacted by oil and gas production curtailments, lack of investment in major industrial projects, less drilling and completions activity and the fact that margin pressure remained a challenge as costs increased namely in fuel and maintenance. Vertex continues to address the needs of a diversified customer base by actively servicing customers outside the oil and gas industry. This has resulted in an increase in the mix of revenue from non-oil and gas customers to 43% of Vertex's total revenues in 2019, compared to 7% in 2015, a trend Vertex expects to continue.

Revenue and Adjusted EBITDA remained stable from 2018 to 2019 due to the 2018 acquisitions which offset contraction and increased competition in the oil and gas sector. As noted above, the fourth quarter of 2019 faced challenges from an opportunity perspective that negatively impacted operating results. In addition, $6.7 million in impairment charges were recognized during that quarter. Revenues for the second quarter of 2018 were impacted by the usual spring break up period. Net loss for that quarter reflects $3.6 million in one-time refinancing costs. Net income for the third quarter of 2018 reflects $6.6 million in bargain purchase gains from acquisition.

(2) Restatement of quarterly balances: Net (loss) income and Adjusted EBITDA in the first, second and third quarter of 2019 have been restated as a result of enhanced interpretation of the guidance of IFRS 16 – Leases. The changes result in an increase to direct costs and general and administrative expenses offset by a reduction of depreciation on right of use assets and interest accretion on lease liabilities.

In the three months ended March 31, 2019 net loss and Adjusted EBITDA were previously $614 and $6,307 respectively. In the three months ended June 30, 2019 net loss and Adjusted EBITDA were $1,320 and $6,253 respectively. Finally, in the three months ended September 30, 2019 net loss and Adjusted EBITDA were $553 and $7,281 respectively. Basic and diluted loss per share was not impacted by these changes.

6.0 Liquidity and Capital Management

The following table sets forth the Company's cash flow by activity for the following years:

	December 31	
	2019	2018
Cash provided by operating activities	**22,174**	9,254
Cash used in investing activities	**(6,647)**	(8,527)
Cash (used in) provided by financing activities	**(17,460)**	1,324
	(1,933)	2,051

The Company expects to generate sufficient cash flows from operations and continues to access its Credit Facilities to meet contractual obligations, planned expenditures and growth initiatives as they are required. The Company expects working capital investments will be required to support future revenue growth that is consistent with historical requirements. The Company typically utilizes its available committed operating loans and capital lease lines which provide in excess of $35 million to fund working capital requirements and planned expenditures.

6.1 Cash Provided by Operating Activities

Cash provided by operating activities before non-cash working capital items was $15.6 million during 2019, an increase of $2.6 million from $13.0 million during 2018. The increase was impacted by the adoption of IFRS 16 – Leases which shifted $6.2 million of cash outflow from Cash Provided by Operating Activities to Cash Provided by Financing Activities. Cash provided by operating activities was $22.2 million during 2019, an increase of $12.9 million from the cash used in operating activities of $9.3 million during 2018. As noted, $6.2 million of this change is the result of IFRS 16 adoption. The remaining improvement is due to the reduction of non-cash working capital from 2018 to 2019 offset by softer operating results which generated less cash then in 2018.

6.2 Cash Used in Investing Activities

Cash used in investing activities was $6.6 million during 2019, a decrease of $1.9 million from the cash used in investing activities of $8.5 million during 2018. Acquisition of subsidiaries, net of cash acquired, decreased as the 2018 acquisitions resulted in a use of cash of $4.5 million compared to nil in 2019. Vertex's capital expenditure program was flat from 2018 to 2019 while disposal proceeds were lower in 2019 by $2.2 million compared to 2018. Vertex invested $0.8 million in intangible assets related to the development of new products to incorporate into existing service lines.

6.3 Cash (Used in) Provided by Financing Activities

Cash used in financing activities was $17.5 million during 2019, a decrease of $18.8 million from cash provided by financing activities of $1.3 million during 2018. As noted above, $6.2 million of this variance is the result of adopting IFRS 16 – Leases. 2019 could be described as a normal debt repayment year compared to 2018 where the Company refinanced its credit facilities and completed three major acquisitions which all required changes to the capital structure. Vertex is focused on reducing its overall debt through scheduled repayments in 2020.

6.4 Working Capital

	December 31,	
	2019	2018
Current assets	**40,366**	51,085
Current liabilities (excluding current portion of loans and borrowings, other liabilities, and lease liabilities)	**16,187**	18,367
Working Capital	**24,179**	32,718

Working capital at year end 2019 was $24.2 million, a decrease of $8.5 million from $32.7 million at December 31, 2018. Accounts receivable, contract assets, prepaids and inventories decreased by $10.7 million in 2019, which was offset by decreases in accounts payable and accrued liabilities, contract liabilities and income taxes payable of $2.2 million from December 31, 2018 to December 31, 2019.

6.5 Credit Facilities

	December 31,	
	2019	2018
Revolving and operating loans:		
Committed revolving and operating facilities	**35,000**	35,000
Drawn on revolving and operating facilities	**21,400**	29,000
Available revolving and operating facilities (1)	**13,600**	6,000

(1) Calculated as available revolving and operating line less drawn credit facilities

On May 11, 2018 and subsequently amended on July 12, 2018, the Company refinanced its demand operating loan, senior debt and subordinated debt with a secured credit facility (the "Credit Facilities") involving a syndicate of financial institutions led by HSBC Bank Canada ("HSBC"). The total Credit Facilities of $85.0 million are broken into three committed facilities: a $30.0 million syndicated facility ("revolving loan"), a $50.0 million term loan facility ("term loan"), and a $5.0 million operating facility ("operating loan"). This agreement includes an additional $20.0 million accordion facility. The Credit Facilities are for a three-year committed term maturing May 10, 2021.

On September 27, 2019, the Company amended the above noted Credit Facility by adding $5.0 million on its term loan and applied the proceeds as a payment against the revolving loan. The amortization schedule and the step-down schedule of the ratio of consolidated senior indebtedness to trailing EBITDA for bank purposes (referred to as "Bank EBITDA" hereafter in this section 6.5 and defined below under the heading "Debt Covenants")was also revised and is described in the 2019 audited financial statements.

As of the date of this MD&A, amendments, which are positive for the Company, are in progress as described in the subsequent events note to the financial statements. Salient features are as follow: a) the maturity date has been extended to November 11, 2021; b) the Net Senior Funded Debt to EBITDA ratio will be increased to 4.25:1 for the fiscal quarter ending March 31, 2020, increased to 5.00:1 for the fiscal quarters ending June 30, 2020 through March 31, 2021, and stepped down to 4.25:1 for each fiscal quarter thereafter; c) the Fixed Charge Coverage Ratio will be reduced to 1.10:1; d) principal payment requirements will be reduced.

Effective March 31, 2020, the interest rates under the revolving and term loans were amended as described in the subsequent event notes to the financial statements.

In addition, as of the date of this MD&A, additional Term Loans in the amounts of $6.25M and $2M to support the Company's liquidity have been approved by HSBC and are also described in the subsequent events note to the financial statements. Legal documentation and final execution of the $6.25M loan are still to be completed.

At December 31, 2019, the following terms were in effect:

Revolving loan
The revolving loan is authorized to a maximum of $30.0 million. It can be drawn by a mix of account overdraft with interest at rates ranging from HSBC's CAD prime rate or USD base rate plus 0.75% to 2.00%, CAD Bankers' Acceptance rate, Letters of Credit, USD LIBOR loans plus stamping fees of 1.75% to 3.00%. The Company pays a standby fee on any unutilized portion of the revolving facility on the last day of each fiscal quarter at rates ranging from 0.35% to 0.60%. The interest rate ranges are based on the funded debt to Bank EBITDA ratio for the preceding quarter.

Term loan
The balance of the term loan at December 31, 2019 was $45.7 million. The interest rate on the term loan can be a mix of rates ranging from HSBC's CAD prime rate or USD base rate plus 0.75% to 2.00%, CAD Bankers' Acceptance rate, Letters of Credit, USD LIBOR loans plus stamping fees of 1.75% to 3.00%. The interest rate ranges are based on the funded debt to Bank EBITDA ratio for the preceding quarter. The term loan is repayable in four quarterly principal payments of approximately $1.5 million, followed by three quarterly principal payments of approximately $1.8 million, with a final payment of $37.2 million due on maturity of May 10, 2021. In addition to the scheduled principal payments, the term loan includes an additional principal payment based on an annual excess cash flow calculation. The excess cash flow calculation is applicable if the funded debt to Bank EBITDA ratio at December 31, 2019 exceeds 2.75:1.00 and at year end the excess cash flow calculation resulted in an additional payment on the term loan of $0.9 million which has been included in the current portion of loans and borrowings on the balance sheet.

Operating loan
The syndicate facilities include a secured operating facility authorized to a maximum of $5.0 million to be used for general corporate purposes. The operating loan may be borrowed, repaid, and re-borrowed on a revolving basis until maturity on May 10, 2021. To the extent funds are drawn on the operating facility they will bear interest at rates ranging from HSBC's CAD prime rate or USD base rate plus 0.75%-2.00%. There was no amount drawn on this facility at December 31, 2019.

Debt as of December 31, 2019, consisted of the items noted in Section 6.6 Commitment and Contingencies.

Debt Covenants

Trailing twelve-month Bank EBITDA includes various adjustments as approved by the syndicate of lenders, when calculating covenants. Bank EBITDA was $21.7 million for the trailing twelve months ending December 31, 2019.

All loans are being provided in Canadian dollars and are subject to the following financial covenants:

- The ratio of consolidated senior indebtedness to trailing Bank EBITDA, calculated on a trailing twelve-month basis, must not exceed:
  - 3.75 to 1.00 for all quarters ending in fiscal 2019 and 2020.
  - 3.50 to 1.00 thereafter.
- The ratio of net cash flow to fixed charges, the Fixed Charge Coverage ratio, must not be less than 1.20 to 1.00 calculated on a rolling four-quarter basis.

The relevant definitions of key ratio terms set forth in Credit Facility is as follows:

- Consolidated senior indebtedness is defined as the outstanding balance of the revolving loan, plus the outstanding principal balance of the senior term loan, plus principal portions of any equipment loans and secured lease liabilities.

- Bank EBITDA is defined as net income before interest, taxes, depreciation and amortization, gains and losses on disposal of assets, amortization of capitalized deferred financing costs, goodwill/intangible impairment, stock-based compensation, and other gains and losses not considered reflective of underlying operations. Trailing twelve-month Bank EBITDA attributable to businesses acquired in the period are permitted to be added to Bank EBITDA.
- Net cash flow is defined as Bank EBITDA reduced by net capital expenditures and cash taxes.
- Fixed charges are calculated as interest expense plus scheduled principal payments of indebtedness during the twelve-month trailing period.

At December 31, 2019, the Company was not in compliance with a requirement for pre-approval by its lenders of a component within the calculation of its debt covenants. Subsequent to the year-end, the required approval was provided retroactively, and the Company was deemed by the lenders to be in compliance with the terms and covenants of the lending agreement as follows:

		December 31	
	Target	**2019**	2018
Credit facilities			
Funded debt to EBITDA	< 3.75 : 1	**3.59**	3.37
Fixed charge coverage ratio	> 1.20 : 1	**1.26**	1.98

6.6 Commitments and Contingencies

As part of the Company's normal operations, it often enters into contracts, such as leases and purchase contracts, which obligate the Company to make disbursements in the future. Contractual maturities for financial liabilities on an undiscounted basis, including interest and principal at December 31, 2019 are as follows:

	Due within one year	Due between one and five years	Total
Accounts payable and accrued liabilities	15,927	-	**15,927**
Revolving loan	1,034	21,834	**22,868**
Term loan	9,817	38,812	**48,629**
Equipment loans	2,891	1,363	**4,254**
Other liabilities	2,050	1,011	**3,061**
Lease liabilities	6,606	19,693	**26,299**
Financial liabilities	38,325	82,713	**121,038**

Legal Claims

In the ordinary course of business activities, the Company may be contingently liable for litigation and claims with customers, suppliers and other third parties. Management believes that adequate provisions have been made for potential claims in the Company's accounts. Although it is not possible to estimate the extent of potential costs and losses, if any, management believes, but can provide no assurance, that the ultimate resolution of such contingencies would not have a material adverse effect on the consolidated financial position of the Company.

Off-Balance Sheet Arrangements

At December 31, 2019 and 2018, the Company did not have any off-balance sheet arrangements.

6.7 Capital Expenditures

As discussed in Section 6.2 Cash Used in Investing Activities, gross capital expenditure was in line with the Company's approved capital plan for 2019 and comparable to 2018 levels. The Company sold certain under-utilized assets that were not able to be redeployed in other geographical locations in order to improve utilization. In 2019, the Company sold $1.8 million worth of capital assets compared to $4.0 million for 2018. Rolling stock acquired under secured lease liabilities during the year ended December 31, 2019 totaled $3.0 million (2018 - $3.9 million) and have been treated as non-cash transactions for purposes of the consolidated statement of cash flows.

Annual net capital expenditures for 2020 are budgeted to be in the range of $5 million to $8 million. The maintenance and growth capital expenditures are not committed for or required if factors related to economics, industrial and customer spending plans change or destabilize.

6.8 Credit Risk

The Company's revenues come from a diverse customer base, which includes the oil and gas, real estate, utilities, agriculture, municipalities, telecommunication, and mining industries in western Canada. The Company believes that there is no unusual exposure associated with the collection of accounts receivable outside of the normal risk associated with contract audits and normal trade terms common in the oil and gas industry. The Company performs regular credit assessments of its customers and provides allowances for potentially uncollectible accounts receivable. For the year ended December 31, 2019, the Company had one customer that accounted for 10.9% of the consolidated sales (2018 – no customers greater than 10%). The aging analysis of accounts receivable is as follows:

	2019	2018
0 to 30 days	**15,085**	18,667
31 to 60 days	**9,405**	11,730
61 to 90 days	**2,883**	4,246
Over 90 days	**2,818**	5,494
Holdbacks	**7**	62
Trade accounts receivable	**30,198**	40,199
Allowance for expected credit losses	**(317)**	(254)
Trade receivables, net of allowance	**29,881**	39,945
Accrued receivables	**1,154**	-
Other receivables	**1,784**	358
	32,819	40,303

6.9 Outstanding Share Data

As of the date of this MD&A, the Company had 91,253,115 Common Shares outstanding. As of the same date, the Company had outstanding 4,085,000 stock options and 2,197,206 warrants to purchase up to an aggregate of 6,282,206 Common Shares.

6.10 Transactions with Related Parties

All related party transactions are entered into in the normal course of business, materially under the same commercial terms and conditions as transactions with unrelated companies and are recorded at the exchange amount. Related party transactions include transactions with other private companies that are owned or controlled by a director, officer.

	Nature of relationship	**2019**	2018
Transactions:			
Repayment of unsecured lease liabilities and associated interest accretion	(i)	**900**	**-**
General and administrative expenses - rent	(i)	**-**	900
Property and equipment additions	(i)	**-**	1,186

(i) Related by common director, officer

Included in general and administrative expenses is remuneration of the key management personnel of the Company, which includes directors and officers of the Company. For the year ended December 31, 2019, remuneration of $1,672 (2018 - $1,921) included $1,536 of salaries and short-term benefits and $136 of share-based compensation (2018 - $1,805 and $116, respectively) which were paid to key management. Directors and key management own 45.2% of the Company.

7.0 Critical Accounting Judgments, Estimates and Accounting Policy Developments

7.1 Critical Judgments in Applying the Company's Accounting Policies

The preparation of the consolidated financial statements requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets and liabilities at the date of the consolidated financial statements, the reported amounts of revenues and expenses during the reporting period, as well as the disclosures of contingent assets and liabilities. Accordingly, actual results could differ from these estimates and judgments.

The Company has:

- continuously refined and documented its management and internal reporting systems to ensure that accurate and timely internal and external information is gathered and disseminated. Management also regularly evaluates these estimates and assumptions, which are based on past experience and other factors that are deemed reasonable under the circumstances; and
- hired employees and consultants who have the skills required to make such estimates and ensures that employees or departments with the most knowledge of the activity are responsible for the estimates. Furthermore, past estimates are reviewed and compared to actual results, and actual results are compared to budgets in order to make more informed decisions on future estimates.

The Company's summary of significant accounting policies, estimates and critical judgements are contained in note 5 to the consolidate financial statements.

7.2 New accounting pronouncements adopted in 2019 – IFRS 16, Leases

Effective January 1, 2019, the Company adopted IFRS 16, Leases. For comparative periods prior to 2019, the Company applied leases policies in accordance with IAS 17, Leases and IFRIC 4, Determining Whether an Arrangement Contains a Lease. Note 29 outlines the effect of adopting IFRS 16 requirements on January 1, 2019.

At inception of a contract, the Company assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for considerations. The Company assesses whether the contract involves the use of an identified asset, whether the Company has the right to obtain substantially all of the economic benefits from use of the asset during the term of the arrangement and if the Company has the right to direct the use of the asset. At inception or on reassessment of a contract that contains a lease component, if applicable, the Company allocates the consideration in the contract to each lease component on the basis of their relative standalone prices.

As a lessee, the Company recognizes a right of use ("ROU") asset and a lease liability at the commencement date of a lease. The ROU asset is initially measured at cost, which is comprised of the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, less any lease incentives received.

The ROU asset is subsequently amortized from the commencement date to the earlier of the end of the lease term, or the end of the useful life of the asset. In addition, the ROU asset may be reduced due to impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

A lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted by the interest rate implicit in the lease, or if that rate cannot be readily determined, the incremental borrowing rate. Lease payments included in the measurement of the lease liability are comprised of:

- Fixed payments, less any lease incentives receivable;
- Variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- Amounts expected to be payable under a residual value guarantee;
- Exercise prices of purchase options if the Company is reasonably certain to exercise that option; and
- Payments of penalties for terminating the lease if the Company is reasonably certain to exercise an option to terminate.

The lease liability is measured at amortized cost using the effective interest method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, or if there is a change in the Company's estimate or assessment of the expected amount payable under a residual value guarantee, purchase, extension or termination option. Variable lease payments are not included in the initial measurement of the lease liability and are charged directly to profit.

The Company has elected not to recognize ROU assets and lease liabilities for short-term leases that have a lease term of twelve months or less and leases of low-value assets. The lease payments associated with these leases are charged directly to profit on a straight-line basis over the lease term.

7.3 Future Accounting Standard Pronouncements

The Company has reviewed new and revised standards and interpretations that have been approved by the IASB. There have been no new standards or interpretations issued during 2019 that significantly impact Vertex.

7.4 Financial Instruments

The Company considers managing risk as being an integral part of its development and diversification strategies. The Company uses a proactive and rigorous approach for management of the financial risks to which it is exposed.

The Company does not enter into financial instrument agreements, including derivative financial instruments, for speculative purposes.

The Company's most significant financial risk exposure and its financial risk management policies are discussed in Note 26 to the Annual Financial Statements.

8.0 Forward-Looking Information

Any "financial outlook" or "future oriented financial information" in this MD&A, as defined by applicable securities laws, has been approved by management of Vertex. Such financial outlook or future oriented financial information is provided for the purpose of providing information about management's current expectations and plans relating to the future. Readers are cautioned that reliance on such information may not be appropriate for other circumstances.

Certain statements contained in this document constitute "forward-looking information". When used in this document or by any of the Company's management, the words "may", "would", "will", "intend", "plan", "propose", "anticipate" and "believe" are intended to identify forward-looking information. In particular, but without limiting the foregoing, this document contains forward-looking information and statements pertaining to the following: the Company's key strategies, objectives and competitive strengths; anticipated expenses; the Company's ability to integrate and capitalize on underutilized equipment through cross-selling opportunities across service lines and reducing redundant costs in 2019; growth opportunities in the Company's Environmental Services segment in 2019; supply and demand for the Company's services; anticipated savings in 2019, resulting from the Credit Facilities restructuring; activity levels in the oil and gas industry and other industries in which the Company operates; annual gross maintenance capital expenditures for 2019; future development activities; and the Company's ability to retain existing clients and attract new business, particularly business outside of the oil and gas industry. Such statements reflect the Company's forecasts, estimates and expectations, as they relate to the Company's current views based on its experience and expertise with respect to future events, and are subject to certain risks, uncertainties and assumptions.

The forward-looking information and statements contained in this document reflect several material factors and expectations and assumptions of the Company, including, without limitation: that the Company will continue to conduct its operations in a manner consistent with past operations; positive future trends in revenue, gross profit margin, Adjusted EBITDA, Bank EBITDA and net income; the general continuance of current or, where applicable, assumed industry conditions; the mix of revenue from non-oil and gas customers in 2019; pricing of the Company's services; the Company's ability to market successfully to current and new clients; the Company's ability to obtain qualified personnel and equipment in a timely and cost-effective manner; the Company's future debt levels; the impact of competition on the Company; the Company's ability to obtain financing on acceptable terms; the general continuance of current or, where applicable, assumed industry conditions; the continuance of existing tax, royalty and regulatory regimes; the impact of seasonal weather conditions; client activity levels; anticipated market recovery; the Company's anticipated business strategies and expected success; the Company's ability to utilize its equipment; levels of deployable equipment; and future sources of funding for the Company's capital program.

The forward-looking information and statements included in this document are not guarantees of future performance and should not be unduly relied upon. Such information and statements involve known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in such forward-looking information or statements, including, without limitation: volatility of the oil and natural gas industry; dependence on customer contracts and market acceptance; the Company's growth strategy may not achieve anticipated results; potential litigation claims; difficulty in attracting and retaining skilled personnel; adverse litigation judgments, settlements and exposure to liability resulting from legal proceedings could reduce profits of limit Vertex's ability to operate; the market for Vertex's products and services is subject to extensive government and regulatory approvals; health, safety and environment laws and regulations may require the Company to make substantial expenditures or cause it to incur substantial liabilities; the Company may fail to realize anticipated benefits of future acquisitions; Vertex's indebtedness may adversely affects its financial flexibility and competitive position; competition in the industries in which Vertex operates; downturns in general economic and market conditions; operational hazards and unforeseen interruptions for which Vertex may not be adequately insured; positive covenants in Vertex's material contracts could limit its ability to operate; third part credit risk; conservation measures and technological advances may reduce demand for hydrocarbons; loss of the Company's information and computer systems or cyber-attacks; director and officer conflicts of interest; a reassessment by tax authorities of Vertex's income calculations; volatility in the price of the Common Shares; and the risk factors set forth under the heading "Risk Factors" in the AIF.

Vertex's business is subject to a number of risks and uncertainties. Readers are encouraged to review and carefully consider the risk factors described in the AIF, which risk factors are specifically incorporated by reference herein.

The forward-looking statements contained in this MD&A are expressly qualified in their entirety by this cautionary statement. The forward-looking statements included in this MD&A are made as of the date of this MD&A. The Company does not intend and does not assume any obligation to update any such factors or to publicly announce the result of any revisions to any of the forward-looking statements contained herein to reflect future results, events or developments, unless required by law.

9.0 Additional Information

Additional information, including the AIF, is available on SEDAR at www.sedar.com and the Company's website at www.vertex.ca.