CEMATRIX CORPORATION

Management's Discussion and Analysis

For the Year Ended December 31, 2019

Date Completed: April 27, 2020

CEMATRIX CORPORATION
www.cematrix.com

Form 51-102F1 - Management's Discussion & Analysis
For the Year Ended December 31, 2019

The following is the management's discussion and analysis ("MD&A") of CEMATRIX Corporation ("CEMATRIX" or the "Company") for the year ended December 31, 2019. This MD&A should be read in conjunction with the audited consolidated financial statements of the Company for the year ended December 31, 2019 and the related notes thereto ("Consolidated Financial Statements") and the audited consolidated financial statements and MD&A of the Company for the year ended December 31, 2018 and related notes thereto. The Consolidated Financial Statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") and interpretations of the International Reporting Interpretation Committee ("IFRIC"). All dollar figures included therein and in this MD&A are in Canadian dollars.

Additional information relevant to the Company's activities can be found on SEDAR at www.sedar.com. CEMATRIX is listed on the TSX Venture Exchange under the trading symbol "cvx".

The Audit Committee of the Company reviewed and recommended for approval by the Board of Directors of the Company the Consolidated Financial Statements and MD&A for the year ended December 31, 2019. The Board of Directors of the Company reviewed and approved these Consolidated Financial Statements and MD&A on April 27, 2020.

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Forward Looking Statements

This MD&A contains certain statements and disclosures that may constitute forward-looking information under applicable securities law. All statements and disclosures, other than those of historical fact, which address activities, events, outcomes, results or developments that the Company anticipates or expects may or will occur in the future (in whole or in part) should be considered forward-looking information. In some cases, forward-looking information can be identified by such terms as “forecast”, “future, “may”, “will”, “expect”, “anticipate”, “believe”, “potential”, “enable”, “plan”, “continue”, “contemplate”, “pro-forma” or other comparable terminology. Forward-looking information presented in such statements or disclosures may, amongst other things relate to: sources of revenue and income; forecasts of capital expenditures and sources of financing thereof; the Company’s business outlook; plans and objectives of management for future operations; forecast business results; and anticipated financial performance.

The Company has identified what it considers to be the material forward-looking statements and disclosure in this MD&A and has listed them in Appendix A. The material factors, material assumptions and material risks that provide the basis for those statements and disclosure have also been provided in Appendix A.

The forward-looking information in statements or disclosure in this MD&A is based (in whole or in part) upon factors which may cause actual results, performance or achievements of the Company to differ materially from those contemplated (whether expressly or by implication) in the forward-looking information. Various assumptions or factors are typically applied in drawing conclusions or making forecasts or projections set out in forward-looking information. Those assumptions and factors are based on information currently available to the Company including information obtained by the Company from third-party industry analysts and other third-party sources. Actual results or outcomes may differ materially from those predicted by such statements or disclosures. While the Company does not know what impact any of those differences may have, its business, results of operations, financial condition and its credit stability may be materially adversely affected.

The Company has discussed, in Section D. – Key Market Drivers and in Section E. - Key Risks and Uncertainties of its MD&A the significant market drivers and risk factors that affect its business and could cause actual results to differ materially from the forward-looking information disclosed herein. The Company cautions the reader that these factors are not exhaustive. The risk factors that could lead to differences in business results and which could cause actual results to differ materially from the forward-looking information disclosed herein include, without limitation, legislative and regulatory developments that may affect costs, revenues, the speed and degree of competition entering the market, global capital markets activity, timing and extent of changes in prevailing interest rates, inflation levels and general economic conditions in geographic areas where the Company operates, results of financing efforts, changes in counterparty risk and the impact of accounting standards issued by the International Accounting Standards Board.

The Company is not obligated to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by applicable laws. Because of the risks, uncertainties and assumptions contained herein, prospective investors should not place undue reliance on forward-looking statements or disclosures. The foregoing statements expressly qualify any forward-looking information contained herein.

A. Purpose of the Company's MD&A

The purpose of this MD&A is to provide a narrative explanation, through the eyes of management, to assist the reader in understanding the Company's performance for the year ended December 31, 2019, the Company's financial condition as at December 31, 2019 and its future prospects.

B. Highlights

Corporate Overview

Through its wholly-owned subsidiaries CEMATRIX (Canada) Inc., CEMATRIX (USA) Inc. ("Cematrix USA"), MixOnSite USA, Inc. ("MOS") and Pacific International Grout Co. ("PIGCO"), CEMATRIX uses specially developed equipment and proprietary or exclusive use foaming agents to produce and pour cellular concrete for various applications in the infrastructure, industrial and commercial construction markets.

Cellular concrete is a cement slurry-based product that is combined with air to result in a very lightweight, foamed concrete-like material that has thermal insulating qualities with moderate structural strength. It is generally lighter than water and is used as a replacement for rigid and other types of insulation and as a lightweight fill or a void fill, which includes tunnel grouting.

The Company's current market focus is in the construction market for infrastructure in Western Canada, Ontario and Quebec and the United States of America ("U.S.").

The infrastructure market sector primarily relates to work on public construction projects that are funded by provincial, state and federal governments. Some examples of this type of work are as follows: the insulation of road bases; the protection of permafrost under buildings, utilities, roads and runways; the insulation of shallow utility installations; industrial and commercial floor bases; the replacement of weak and/or unstable soils and soils that are subject to seismic conditions; mechanical stabilized earth ("MSE") panels and retaining wall backfill; grouting; and tunnel backfill. Work in this sector generally requires the prior approval of the Company's various products and applications by local regulatory bodies.

The Company's revenue is recognized as the Company processes and places the cellular concrete on site, based on the number of cubic metres processed and placed.

The nature of the Company's sales is generally "one-off" type sales, meaning there is little in the way of carry over in sales from year to year with the same customer; except to the extent that the Company has repeat business related to a specific application or location, or a project is sufficiently large in scope, that it continues from one period into the next. The goal is to increase this type of repeatable and predictable source of revenue.

Work is generally as a sub-contractor to various engineering and construction firms who are awarded the prime contract from the owner of the particular project.

The Company has two distinct types of production equipment, as follows:

Dry mix production equipment is fully automated and the cement slurry mixing process is done directly from cement and other dry powders. This equipment permits the production of high hourly volumes. The dry mix system enables the Company to improve the quality of its end product, while reducing its unit cost by up to 20% as compared to the wet mix process. However, the dry mix process is typically not suitable for small to medium sized projects because of the higher costs associated with mobilization together with the onsite space required for set up; and

Wet mix production equipment is partially automated and the pre-designed cement slurry required is delivered by a Ready Mix provider; this equipment has lower hourly production capability and is suitable for small volume projects or projects where there is no space for the larger dry mix units.

The Company's fleet of production equipment currently consists of ten dry mix units that can produce up to 230 cubic metres per hour of cellular concrete and eight wet mix units that have the capability of producing from 50 to 100 cubic metres per hour of cellular concrete. The fleet is mobile and can be moved to any project in North America.

The value proposition that CEMATRIX offers to customers is as follows:

CEMATRIX cellular concrete saves significant time and money for its customers and provides a better overall long term construction solution (the "Value Proposition").

The Company`s customer service solution is supported by acquired and internally developed technologies that enable the production of high volumes of consistent, low density insulating cellular concrete; the North American exclusive rights to a protein based foaming agent and an acquired synthetic foaming agent formula; the proprietary material mix design expertise; the technical support for thermal and structural design to assist engineering firms in the design of applications for cellular concrete; and internally designed and constructed specialty equipment for the production of cellular concrete.

Over the years the Company has invested in additional staff and equipment in order to prepare for what management believes will be a significant increase in annual sales, as the Company's product reaches the "tipping point' for a number of applications. Tipping point refers to the point in time where customers decide that they will use the Company's product, as opposed to alternative products, for certain applications (i.e. all bridge abutment work, or all MSE panel backfill or all the insulation of oil sand modules etc.). The tipping point for oil and gas applications began to be realized for oil and gas construction before the financial crisis of 2008/9 and the significant oil price decrease in 2014/15, but have ended with those events. Revenue from oil and gas applications has never rebounded because the related construction has become negligible. The Company is now working towards the tipping point for various infrastructure type applications. The cost of this investment, in terms of additional staff and equipment, has negatively affected the financial results over the past few years, however, it has helped to put the Company in a better position to achieve sales growth, as it occurs and to utilize its economies of scale with the acquisition of MixOnSite and Pacific International Grout Co. in the US.

The Company's head office is located in Calgary, Alberta.

Financial

Cematrix had another year of significant growth and change, which resulted in record revenues for the year and another step towards sustainability. The acquisition of PIGCO closed on October 1, 2019 and solidifies Cematrix' presence in the US market allowing Cematrix to expand into certain niche markets of the Cellular concrete industry, while diversifying geographically and reducing the seasonality of revenues. The timing of the close had two significant implications. Firstly, PIGCO's contribution to top line revenue for fiscal 2019 was minimal, with the majority of the growth coming from the base business. Secondly, the effect on short term cash was negative as a result of project delays, fixed operating costs, acquisition financing and capital incurred in preparation for projects to be completed in the near term. This is a temporary situation and we expect the acquisition of PIGCO will prove to be accretive and contribute disproportionately to revenue and cash flow in the future.

Revenues, were $22.6. million, an increase of $5.0 million or 28%, compared to $17.6 million in 2018. Gross Margin and Gross Margin Percentage were $5.8 million and 26% respectively for 2019 compared to $4.4 million or 25%, when compared to 2018, an increase of $1.4 million or 33%. These operational improvements did not carry through fully to the bottom line as a result of an unusual one-time credit loss of $455,334 recognized when a customer filed for Chapter 11. The net result was an improvement of $0.8 million in the loss attributed to the common shareholders from $1.1 million in 2018 to $0.3 million in 2019.

Liquidity continues to be a focus for management and the cash flow being generated from the business is a significant part of that equation. Management believes that Funds Flow from Operations is the best measure for capturing this metric and it is defined as cash flow from operating activities before the net change in non-cash working capital. For the full year 2019, Funds Flow from Operations was $190,637 compared to $552,361 in 2018. The reduction is largely the result of the aforementioned one-time and unusual credit loss and the effect of the late closing of the PIGCO acquisition.

Awarded Significant Infrastructure Project

On February 18, 2020 the CEMATRIX group of companies received a Letter of Intent for one of the largest cellular concrete projects ever tendered in North America. The project includes fifteen new overpasses at an estimated contract value of $12.3 million USD and could grow from there. The project is scheduled to commence in 2021.

Acquisition of Pacific International Grout Company

On October 1, 2019 the Company acquired all the issued and outstanding shares of PIGCO for consideration of:

- Cash in the amount of $2.8 million USD (the "Cash Purchase Price");
- Vendor financing in the amount of $0.575 million USD, which is non interest bearing and is to be repaid over six months commencing January 1, 2020; and
- 3,305,250 common shares of the Company.

In addition to this, the Company will assume a $0.430 million USD shareholder loan (the "Vendor Loan") and enter into a four year earn-out (the "Earn-out"). The $0.430 million USD Vendor Loan bears no interest and is to be repaid in twelve equal monthly installments commencing on November 1, 2019. The Earn-out will be calculated annually on the operations of PIGCO for four years following the effective date the acquisition, August 31, 2019, and will pay the vendor 65% of the EBITDA above $0.5 million USD in each 12 month period.

The Cash Purchase Price was financed with a $2.8 million USD loan (the "Loan") with the Business Development Bank of Canada. The interest rate is set at 3.7% above the BDC's US Dollar Floating Base rate, which is currently at 6.5%. The Loan matures and will be repaid in full on December 1, 2025. Principal prepayments commence on July 1, 2020 with six monthly payments in each calendar year from July to December for a total of 36 monthly payments. The first monthly principal payment is $78,050 USD and the remaining 35 monthly principal repayments are $77,770 USD.

Non Brokered Private Placement

On August 26, 2019, CEMATRIX announced the completion of a non-brokered private placement of 11,500,000 units (each, a "Unit") at a price of $0.20 per Unit for gross proceeds of $2,300,000. Each Unit will be comprised of one common share of the Corporation (a "Common Share") and one warrant (a "Warrant"). Each Warrant will be exercisable into one Common Share for a period of two years at an exercise price of $0.30 per Common Share. The proceeds of this financing will be used for general business purposes, improving the liquidity and financial position of the Corporation.

Bristol Capital LTD ("Bristol")

On September 12, 2019 CEMATRIX announced that it has entered into an investor relations agreement with Bristol, a leading investor relations and capital markets advisory firm service Canadian and US micro cap and small cap companies across international markets, to provide investor relations and communication services. Bristol will provide investor relations services to the Corporation, including the development of new and improved investor materials, introductions to Bristol's direct network of investment professionals, coordination of public events and proactive investor relations campaigns to increase the Corporation's exposure in the investment community.

Canadian Highways Research Project

The University of Waterloo is currently working on a research program that will measure the performance of cellular concrete as a roadway subbase over week and unstable soils. This program is co-funded by CEMATRIX and the Natural Science and Engineering Research Council of Canada (NSERC). The project includes both laboratory testing and multiple instrumented roadway test sections. The first test section was successfully installed in October 2018 in The Region of Waterloo, with another longer section to be installed in 2020. The preliminary results of lab and field tests have been highly encouraging, showing potential for much longer lasting highways when compared to traditional construction. Completion of the research program is scheduled for Q4 2020.

C. Business Strategy for Growth and Shareholder Value Creation

CEMATRIX's strategic goal remains to be the leading supplier of competitively priced, high volume, high quality cellular concrete in North America. In 2017, the Company engaged the BDC Consulting Team to help the company evaluate and develop a plan to achieve this goal. The recently developed and implemented BDC Consulting Group/CEMATRIX business strategy is centered on the following key elements:

- Establish and maintain a strong financial position;
- Grow the business through:
  - Building a foundation of key proven applications in existing markets;
  - Methodical regional expansion of these developed applications;
  - Expansion into the U.S. market, which may include other acquisitions; and
  - Plan and execute the timely acquisition and upgrading of the Company's production fleet of equipment.
- Retention, recruitment and maintenance of an experienced and focused management, operations and support team;
- Development and acquisition of technologies to maintain competitiveness; and
- Ongoing development of strategic alliances to support research and development, to supply raw materials and to develop new products and markets.

Since the development and implementation of this strategy, CEMATRIX has improved its financial position, increased its equipment fleet through the acquisitions of PIGCO and MOS; grown its infrastructure sales in both Canada and the U.S.; advanced its strategic alliances with Lafarge and others; expanded regionally into the Canadian Prairies and in part to both the West Coast of Canada and the Ottawa/Montreal regions; retained and added to its key management and support teams; have continued the development of its products and technologies and is now contemplating other complimentary acquisitions.

D. Key Market Drivers

The primary drivers in the marketplace that affect the demand for the Company's cellular concrete include the following:

Product Acceptance Through Education of the Market

CEMATRIX's mission statement is to gain broad market acceptance of its product for various applications throughout North America, with its main focus on Canadian infrastructure and now U.S. infrastructure applications through its recently acquired U.S. subsidiaries MOS and PIGCO. The successful implementation of this vision is dependent on its product becoming accepted by more of the project design engineers and specifiers. These individuals are in charge of the engineering and design of infrastructure projects, the materials that can be used in various projects and the determination of whether cellular concrete can be considered for a particular application.

Extensive education and marketing to geotechnical and design engineers has been, and continues to be, completed by the Company to demonstrate its Value Proposition for cellular concrete for a number of applications.

The Company's ongoing education and marketing program, together with the experience generated from projects throughout its markets in Canada and the U.S., has improved the acceptance by a number of design engineers, particularly in Canada where CEMATRIX continues to develop new markets. For some applications in these new markets, cellular concrete will also need to be accepted and become an approved product by various municipal and provincial government departments.

In this regard, in Canada, CEMATRIX has obtained, or is in the process of obtaining, the various approvals in all provinces and territories that it currently operates in. Quebec is the next major market where approvals are in process.

In the U.S., cellular concrete is already an approved product for various infrastructure applications in most regions of the U.S. and in fact the market development in the U.S. is probably more than ten years ahead of the development of cellular concrete in Canada, a market which has been developed mostly by CEMATRIX on its own, since the early 2000's. The Canadian market significantly different than the U.S. where there are a number of larger competitors, which had included MOS, PIGCO and a significant smaller producers, all of whom have been developing their markets for over forty years, if not longer.

Continued product acceptance by the engineering community, provincial/state transportation departments and project owners is the most important primary driver in generating the Company's sales growth.

Sole Source Provider

When engineering firms or companies are considering specifying cellular concrete into a specific project, particularly in projects related to oil sands and refinery construction, a concern that can arise is the fact that CEMATRIX is the sole provider of cellular concrete in Alberta and for many other regions of Canada. Their concern is that if CEMATRIX is not available to complete their project, then there may be no one else that can do the work as specified. In many cases, this will mean that the project will have to be re-engineered because cellular concrete is not a one for one direct replacement to the products that it replaces. This is not of an issue for infrastructure applications because there are other more expensive product solutions that may be specified as an alternative to the Company's product.

In some instances, owners of projects will not allow the use of a sole provider and others continue to be hesitant to do so, because the costs of re-engineering could be prohibitive. This practice has slowed the development of CEMATRIX's product penetration in Western Canada and has affected the development of other markets in Canada. The Company continues to work with customers, specifiers and design engineers to ensure that the benefits of the CEMATRIX products and services warrant the use of a sole source provider and to ensure these customers that CEMATRIX will be around to be that provider.

The strengthened relationship with Lafarge will benefit the credibility of CEMATRIX as a sole source supplier.

If engineering firms and companies do not accept the nature of CEMATRIX being a sole source supplier this could affect the ability of the Company to grow its sales in the oil and gas construction market.

Of note, the problems inherent of being a sole source provider is not an issue in the U.S. because there is competition in the U.S.

Joint Marketing and Supply Agreements with Lafarge Supporting the Regional Development of Cellular Concrete Markets

The joint marketing agreement with Lafarge, completed in 2016, is for the joint development of CEMATRIX cellular concrete markets throughout Canada to increase the awareness of the construction challenges which can be solved by CEMATRIX cellular concrete solutions and thereby grow sales.

The agreements with Lafarge for the regional development of CEMATRIX cellular concrete markets for the Ready Mix division of Lafarge, completed in February 2017, are intended to grow sales at various regions in Canada where CEMATRIX does not have a physical presence. The initial agreement was for Winnipeg, Manitoba, and other locations will be added at the direction of Lafarge.

The intent of both of these agreements is to increase the sale of cellular concrete by CEMATRIX and the sale of Cement and Ready Mix slurry by Lafarge across Canada.

Whether the agreements result in significant sales growth for CEMATRIX is still not known other than both companies are committed to making it successful.

Availability of Capital for Infrastructure Construction

Government funded infrastructure construction throughout Canada and the U.S. is dependent on the capital funding that is made available to the various municipal, provincial/state and federal governments to make these types of investments. This also affects the timing of projects with which the Company's products could be applicable. Both the Canadian and the U.S. federal, provincial/state and municipal governments continue to allocate significant funds to infrastructure construction, however, the benefit, if any, to CEMATRIX, will be dependent on the type and location of projects to which the infrastructure funds will be allocated.

E. Key Risks and Uncertainties

Besides the issues discussed under Section D - Key Market Drivers, management has identified the following additional risks and uncertainties:

Under Capitalization

The Company has been undercapitalized since its inception and this situation has hindered the Company's ability to expand its sales force in Canada, which was one of the recommendations that came out of the 2017 BDC Consulting strategic review of CEMATRIX. The recommended solution to that issue was to try and use its partners sales staff to provide greater sales coverage in Canada, and although our partner has provided some referrals in Canadian regions where CEMATRIX does not have a physical presence, they have not generated the same level of sales or growth that would have been generated if CEMATRIX had invested in its own sales staff for those regions.

Staffing Requirements

CEMATRIX will always have issues finding experienced individuals to hire for various positions because of the unique nature of its business, but this has become less of an issue with the acquisitions of PIGCO and MOS, and in fact it enables the CEMATRIX group of companies to allocate underutilized operating and technical staff resources between its operating subsidiaries, subject to the limitation created by cross border issues.

Capital Resource Requirements

Capital resource requirements must be matched to the demand for the Company's products. If this demand had increased more quickly than anticipated, prior to the acquisitions of MOS and PIGCO, then the Company may have been challenged to react quickly enough to realize the sales opportunities. With the recent acquisitions, the CEMATRIX group of companies has sufficient capacity for the foreseeable future.

Project Scheduling

The Company has no control over the timing of contracted projects. Delays in contracted work can occur at any time, although it has not been an issue to date. Furthermore, delays in projects can also result in scheduling issues that could prove costly to the Company. The risks associated with scheduling changes will be an ongoing issue for the Company.

Increasing Cement Commodity Prices

In previous years the Company has experienced significant increases in the cost of its key raw materials, cement and flyash. To date, the Company has been able to pass a significant portion of these price increases on to its customers. There is no certainty that this practice will continue, in which case this would reduce the Company's Gross Margin on sales. The prices for these materials have remained relatively stable over the past few years and the Company has been advised by its suppliers of minor increases for 2020. The Company is working towards minimizing any risk by developing equipment that will eliminate the need to rely on higher priced Ready Mix products for its raw material supply, for these types of projects.

Competition

Although the Company is the only significant supplier of cellular concrete in North America, there are a couple of smaller suppliers in Ontario and British Columbia. There are many more suppliers in the U.S. and other countries where the cellular concrete markets are more developed. Accordingly, the possibility of future competition in Canada exists.

There are a significant number of competitors in the U.S., some of which compete with CEMATRIX in the higher volume market. Competition could result in lost sales or reduced Gross Margin. The Company is positioning itself for competition with other suppliers by:

- Developing strong customer and supplier relationships;
- Ensuring that its costs are competitive in relation to costs being incurred by other companies in the industry;
- Developing new materials and processes that continue to place CEMATRIX ahead of the competition's capabilities;
- Striving to ensure that it provides the best in cellular concrete technology, including thermal modeling and structural design assistance, material mix designs, foaming agents and processing equipment.

Product Warranties

The Company has not experienced warranty claims during its existence due to the nature of its product and does not accrue any expense related to possible warranty claims. Even though the Company's products are used in very low risk applications (i.e. replacement of dirt or rigid insulations), the potential exists for such warranty claims being made. The Company works to minimize this risk through ongoing material mix design, product and equipment development and by requiring highly trained quality control staff to be on hand for all projects to check and monitor all input and end product materials.

F. Operations and Overall Performance

Results of Operations

Comparison of the Three Months Ended December 31, 2019 and December 31, 2018

	Three Months Ended December 31		
	2019	2018	Change
Revenue	**$ 5,294,288**	$ 6,136,476	$ (842,188)
Gross margin	**$ 1,054,424**	$ 2,020,323	$ (965,899)
Operating expenses	**(1,593,745)**	(1,098,080)	(495,665)
Operating income (loss)	**(539,321)**	922,243	(1,461,564)
Non-cash stock based compensation	**(54,387)**	(43,833)	(10,554)
Finance costs	**(333,190)**	(198,591)	(134,599)
Other income (expense)	**1,404,496**	(244,441)	1,648,937
Amortization of intangibles	**(188,905)**	(123,690)	(65,215)
Acquisition costs	**(27,195)**	-	(27,195)
Non-cash accretion costs	**(103,911)**	(55,433)	(48,478)
Revaluation of earn-out liability	**(21,788)**	(305,031)	283,243
Non-cash fair value of derivatives	**331,262**	381,690	(50,428)
Income (loss) before income taxes	**467,061**	332,914	134,147
Provision of deferred taxes	**260,137**	(133,644)	393,781
Provision of current taxes	**(23,184)**	-	(23,184)
Income attributable to the common shareholder	**704,014**	199,270	504,744
Unrealized foreign exchange gain (loss) on translation of foreign subsidiaries	**(190,422)**	373,739	(564,161)
Comprehensive income	**$ 513,592**	$ 573,009	**$** (59,417)
Fully diluted gain (loss) per common share	**$ 0.012**	$ 0.004	$ **0.008**

Revenue was $5,294,288 in 2019 compared to $6,136,476 in 2018, a decrease of 14% or $842,188. The decrease was mainly due to lower infrastructure sales in Eastern Canada in 2019, which was partially offset by increased sales in Western Canada and the acquisition of PIGCO, which closed October 1, 2019.

Gross Margin was lower by $965,899 or 48% when compared to the fourth quarter of 2018. As a percentage of revenues, the Gross Margin Percentage declined to 20% compared to 33% in 2018. The decrease in Gross Margin Percentage is mainly due to the effect of decreased revenues on a cost base that includes fixed costs. This effect is commonly referred to as operating leverage and was magnified in 2019 by the acquisition of PIGCO, which occurred late in the calendar year. Excluding the acquisition of PIGCO, Gross Margin would have been 25% and Gross Margin improved to $1,130,173.

Operating expenses were higher by $495,665 or 45% mainly due to the aggregate of the following:

- Inclusion of PIGCO operating expenses of $335,206;
- Salaries, benefits and commissions increased by $28,576 as a result of temporary labor;
- Information technology costs increased by $27,057 as a result of the transition costs;
- Insurance costs increased $23,026 as a result of premium increases;
- Investor relations costs increased $17,573 as a result of transition costs;
- Legal fees increased by $10,337 on general corporate matters.

Non-cash stock based compensation expense was $54,387 in the last quarter of 2019 compared to $43,833 in the last quarter of 2018. The increase of $10,554 is mainly the result of 300,000 stock options granted in the fourth quarter of 2019 to PIGCO employees.

Finance costs were $333,190 in the fourth quarter of 2019 compared to $198,591 in the same period in 2018, an increase of $134,599. The increase can be attributed to the adoption of IFRS 16 effective January 1, 2019 which recharacterizes a portion of certain costs from operating expenses to finance costs. In addition, the cash component of the PIGCO acquisition was financed entirely with a $2,800,000 USD BDC loan, resulting in additional interest of $94,578.

Other income was $1,404,496 in the fourth quarter of 2019 compared to a loss of $244,441 in the fourth quarter of 2018. The increase of $1,648,937 is largely as a result of the gain of $1,278,468 on the PIGCO acquisition and unrealized foreign exchange which is caused by swings in foreign exchange rates in the reporting period. An unrealized foreign exchange gain of $98,693 was recognized in the fourth quarter of 2019 on the following USD denominated liabilities: USD BDC Loan of $36,636 and Convertible Note of $62,057. As the Canadian dollar strengthened relative to the USD, the value of these liabilities decreased, which gives rise to an unrealized foreign exchange gain. The opposite effect occurred in the fourth quarter of 2018 resulting in a foreign exchange loss.

Amortization of intangibles was $188,905 in the fourth quarter of 2019 compared to $123,690 in the fourth quarter of 2018 and originated from the acquisitions of MOS and PIGCO where intangible assets of $638,879 and $551,461 were attributed to the value of the sales backlog on the business combination and was being amortized into income over the period June 1, 2018 to September 30, 2019 for the MOS sales backlog and October 1, 2019 to December 31, 2021 for the PIGCO sales backlog. As the sales backlog for MOS was fully amortized as of September 30, 2019, the amortization expense incurred in the fourth quarter of 2019 relates entirely to the PIGCO sales backlog, while the fourth quarter of 2018 relates entirely to the MOS sales backlog.

Acquisition costs of $27,195 were incurred in the fourth quarter of 2019. These costs are for the acquisition of PIGCO which closed on October 1, 2019.

Non-cash accretion was an expense of $103,911 in the fourth quarter of 2019 compared to $55,433 for the same period in 2018. Accretion expense relating to the remaining tranches of the Earn-out Liability was $82,044 and accretion on the host debt contract of the Convertible Note was $22,341. Both of which originated from the acquisition of MOS and were recorded at a discount. Accretion will end at the maturity date of these liabilities being either May 31, 2020 and/or May 31, 2021.

The Earn-out Liability for the second 12 month period ended May 31, 2020 is estimated to be $571,133 USD which is equivalent to $741,788. The previously recorded liability of $554,592 USD was adjusted to this new higher estimate and resulted in a non cash adjustment loss of $21,788 being recognized in the fourth quarter of 2019. In the fourth quarter of 2018, the Earn-out Liability for the first 12 month period ended May 31, 2019, increased by $305,031 and resulted in a revaluation loss.

On acquisition, the Convertible Note was trifurcated into the host debt contract and conversion and prepayment features, both of which are accounted for as derivatives and revaluated at every reporting period. Based upon the black-scholes option pricing model, the fair value of the conversion and prepayment features of the Convertible Note decreased by a net of $331,262 in the fourth quarter of 2019 resulting in a gain for the same amount compared to an decrease of $381,690 in the fourth quarter of 2018 resulting in a gain in the fourth quarter of 2018.

Unrealized foreign exchange gains and losses on the translation of foreign subsidiaries are recognized through other comprehensive income. MOS, PIGCO and Cematrix (USA) Inc. have a USD functional currency and as the Canadian dollar strengthened relative to the USD, the value of these assets depreciated resulting in an unrealized foreign exchange loss of $192,061 in the fourth quarter of 2019. The opposite effect occurred in the fourth quarter of 2018 which resulted in an unrealized foreign exchange gain of $373,739.

Comparison of the year ended December 31, 2019 and December 31, 2018

	Year Ended December 31		
	2019	2018	Change
Revenue	**$ 22,550,954**	$ 17,560,716	$ 4,990,238
Gross margin	**$ 5,776,457**	$ 4,346,200	$ 1,430,257
Operating expenses	**(5,422,349)**	(3,355,622)	(2,066,727)
Operating income	**354,108**	990,578	(636,470)
Non-cash stock based compensation	**(464,222)**	(85,145)	(379,077)
Finance costs	**(987,362)**	(549,284)	(438,078)
Other income (expense)	**1,630,468**	(222,501)	1,852,969
Amortization of intangibles	**(557,463)**	(283,410)	(274,053)
Acquisition costs	**(373,844)**	(619,723)	245,879
Non-cash accretion costs	**(492,076)**	(284,859)	(207,217)
Revaluation of earn-out liability	**443,127**	(305,031)	748,158
Non-cash fair value of derivatives	**138,181**	65,257	72,924
Loss before income taxes	**(309,083)**	(1,294,118)	985,035
Provision of deferred taxes	**168,634**	202,143	(33,509)
Provision of current taxes	**(113,236)**	-	(113,236)
Loss attributable to the common shareholder	**(253,685)**	(1,091,975)	838,290
Unrealized foreign exchange gain (loss) on translation of foreign subsidiaries	**(451,580)**	364,162	(815,742)
Comprehensive loss	**$ (705,265)**	$ (727,813)	**$** 22,548
Fully diluted loss per common share	**$** (0.005)	$ (0.027)	$ 0.022

Revenue was $22,550,954 for the year ended December 31, 2019, an increase of $4,990,238 or 28%, compared to $17,560,716 recognized in the prior year 2018. Top line revenue growth was seen across all our business lines with Canadian sales increasing to $11.3 million in 2019 or 22% when compared to the $9.3 million in 2018, MOS increasing to $10.6 million in 2019 or 27% compared to $8.3 million in 2018 and PIGCO contributing $0.7 from October 1, 2019 to December 31, 2019.

Gross Margin was $5,776,457 in the fiscal year 2019, an increase of $1,430,257, compared to a Gross Margin of $4,346,200 in the prior year period. As a percentage of revenues, the Gross Margin Percentage improved to 26% compared to 25% in 2018.

Operating expenses were higher by $2,066,727 or 62% mainly due to the following:

- MOS operating costs increased by $1,190,970 to $1,996,198 in 2019 as a result of:
    - A $455,334 credit loss recognized when a customer filed for Chapter 11 on September 11, 2019. This is a provision for the full amounting owing and any settlements received in the future will be recorded as a recovery at that point in time.
    - An additional 5 months of operating costs incurred in 2019 as the acquisition closed on May 31, 2018.
- Inclusion of PIGCO operating expenses of $335,206 for the period of October 1, 2019 to December 31, 2019;
- Salaries, benefits and commissions increased by $228,453 due to the addition of a new sales representative based in Manitoba, cost of living adjustments, increased commissions paid on increased sales and the cost of a temporary technician;
- The Audit fee accrual increased by $53,299 as a result of the growth in the company;
- Investor relations fees increased $49,174 due to the transition of investor relations firms and increased corporate activities;
- Consulting charges increased by $45,116 as a result of one time costs associated with the US OTCQB application and the BDC growth driver program;
- Legal fees increased by $41,504 due to general corporate matters;
- Insurance costs increased $33,864 due to an increase in premiums;
- Travel allowances increased by $17,857 as a result of the increased travel related to increase sales.

Non-cash stock based compensation was $464,222 in 2019 compared to $85,145 in 2018. The increase of $379,077 is the result of the 1,200,000 stock options granted in 2019 and the extension of 1,925,000 previously granted stock options by two years. This includes 600,000 stock options which were granted to select board members which vested immediately as they replaced an equivalent number of stock options that had expired unexercised.

Finance costs were $987,362 in 2019 compared to $549,284 in 2018. The increase of $438,078, can be attributed to the MOS and PIGCO acquisition which were financed primarily with debt. The significant increases are outlined below:

- Incremental interest on the $2,500,000 USD Convertible Note in the amount of $122,858;
- Incremental interest on the new $750,000 USD Operating Loan in the amount of $63,497;
- Incremental interest on the $1,800,000 USD BDC Loan in the amount of $66,027;
- Interest on the new $2,800,000 USD BDC Loan in the amount of $94,578; and
- Incremental interest on leases primally relating to the adoption of IFRS 16 of $67,707.

Other income of $1,630,468 was recognized in 2019 compared to a loss of $222,501 in 2018. The increase of $1,852,969 is largely the result of a gain recognized on the acquisition of PIGCO of $1,277,384 and a $259,443 increase in unrealized foreign exchange gains recognized mainly on the following USD denominated liabilities: USD BDC Loan of $102,495 and Convertible Note of $154,187. As the Canadian dollar strengthened relative to the USD from December 31, 2018 to December 31, 2019, the value of these liabilities decreased, which gives rise to an unrealized foreign exchange gain.

Amortization of intangibles was $557,463 in 2019 compared to $283,410 in 2018 and originated from the acquisitions of MOS and PIGCO where intangible assets of $638,879 and $551,461 respectively were attributed to the value of the sales backlog on the business combination and was being amortized into income over the period June 1, 2018 to September 30, 2019 for the MOS sales backlog and October 1, 2019 to January 31, 2021 for the PIGCO sales backlog. The MOS sales backlog was fully amortized on September 30, 2019.

Acquisition costs were $373,844 in 2019. These costs relate to the acquisition of PIGCO which closed on October 1, 2019. The prior year costs of $619,723 relate to the acquisition of MOS which closed on May 31, 2018.

Non-cash accretion was an expense of $492,076 in 2019 compared to $284,859 in 2018. The increase in non-cash accretion expense is largely attributed to the Earn-out Liability of $407,749 and the host debt contract of the Convertible Note of $86,196, both of which are from the acquisition of MOS and were originally recorded at a discount.

The Earn-out Liability estimate for the first 12 month period ended May 31, 2019 increased in the fourth quarter of 2018, resulting in the revaluation loss of $305,031. In the current year, when the first 12 month period ended May 31, 2019 was completed the liability was reduced by $464,914 resulting in a revaluation gain, which in essence reversed the adjustment recorded in fiscal 2018. This was offset by a revision to the second 12 month period ended May 31, 2020 increasing it by $21,787 resulting in an offsetting revaluation loss in the current year.

On acquisition, the Convertible Note was trifurcated into the host debt contract and conversion and prepayment features, both of which are accounted for as derivatives and revaluated at every reporting period. Based upon the black-scholes option pricing model, the fair value of the conversion and prepayment features of the Convertible Note decreased by $138,181 in 2019 resulting in a gain for the same amount compared to an decrease of $65,257 in the nine months of 2018 resulting in a gain in 2018.

Unrealized foreign exchange gains and losses on the translation of foreign subsidiaries are recognized through other comprehensive income. MOS, PIGCO and Cematrix (USA) Inc. have a USD functional currency and as the Canadian dollar strengthened relative to the USD, the value of these assets depreciated resulting in an unrealized foreign exchange loss of $453,219 in 2019. The opposite effect occurred in 2018 which resulted in an unrealized foreign exchange gain of $364,162.

G. Selected Financial Information and Summary of Financial Results

Annual Results

The following is a summary of the audited financial results for each of the five years ended December 31, 2019. No cash dividends have been declared or paid since the inception of the Company.

Year Ended	Total Revenues	Total Comprehensive Income (Loss)	Income (Loss) Per Share Basic	Income (Loss) Per Share Diluted	Total Assets	Total Non Current Liabilities
	$	$	$	$	$	$
December 31, 2019	**22,550,954**	**(705,265)**	**(0.005)**	**(0.005)**	**30,176,582**	**14,402,414**
December 31, 2018	17,560,716	(727,813)	(0.027)	(0.027)	20,421,964	9,004,190
December 31, 2017	7,713,906	(1,180,543)	(0.034)	(0.034)	6,530,062	2,042,553
December 31, 2016	9,598,861	(1,097,592)	(0.031)	(0.031)	7,575,832	2,123,907
December 31, 2015	15,379,787	1,566,395	0.047	0.046	11,260,623	1,877,457

Quarterly Results

The Company's business is seasonal in nature as it follows the construction season. Typically, revenues in the second half of the year are significantly greater than the first half of the year. The Company continues pursuing other markets where seasonality is less of an issue. This seasonality is reflected in the quarterly results summarized in the table below:

Quarters Ended	Revenues	Comprehensive Income (Loss)	Income (Loss) Per Share Basic	Income (Loss) Per Share Diluted
	$	$	$	$
2019 Year				
March 31	**3,185,726**	**(999,612)**	**(0.019)**	**(0.019)**
June 30	**6,448,543**	**6,946**	**0.004**	**0.004**
September 30	**7,622,397**	**(226,191)**	**(0.006)**	**(0.006)**
December 31	**5,294,288**	**513,592**	**0.012**	**0.011**
Total for year	**22,550,954**	**(705,265)**	**(0.005)**	**(0.005)**
2018 Year				
March 31	1,476,468	(314,375)	(0.009)	(0.009)
June 30	2,907,933	(930,351)	(0.026)	(0.026)
September 30	7,039,839	(56,096)	(0.000)	(0.000)
December 31	6,136,476	573,009	0.004	0.004
Total for year	17,560,716	(727,813)	(0.027)	(0.027)

Note 1: Quarterly loss per share is calculated on a standalone quarterly basis and accordingly the sum of the quarterly amounts may not equal the total for the year

H. Consolidated Statements of Financial Position

	December 31 2019	December 31 2018	Change
Total current assets	**$ 6,634,384**	$ 6,542,167	$ 92,217
Total non current assets	**23,542,198**	13,879,797	9,662,401
Total assets	**$ 30,176,582**	$ 20,421,964	$ 9,754,618
Current liabilities	**$ 8,202,366**	$ 6,672,199	$ 1,530,167
Non current liabilities	**14,402,414**	9,004,190	5,398,224
Total liabilities	**$ 22,604,780**	$ 15,676,389	$ 6,928,391
Shareholders' equity	**$ 7,571,802**	$ 4,745,575	$ 2,826,227

Total current assets increased by $92,217. This increase in aggregate is summarized below:

- Cash increased by $167,121 (See the discussion in Section F - Consolidated Statement of Cash Flows);
- Trade and other receivables decreased by $465,089 as a result of the timing differences in the collections of trade receivables and sales;
- Inventory increased by $290,937 as a result of the PIGCO acquisition and in anticipation of the backlog of projects to be completed in the near term;
- Prepaids and deposits increased by $105,051 mainly due to a deposit for a new building lease that will take effect January 1, 2020 and the acquisition of PIGCO; and
- Share acquisition loans decreased by $5,803 as a result of $8,563 repayment of loan offset by accretion income of $1,869 and interest income of $890.

Total non current assets increased by $9,662,401. This increase in aggregate is summarized below:

- Property and equipment increased by $9,012,797 primarily as a result of the PIGCO acquisition which contributed assets of $8,613,415, accounting for two building leases under IFRS 16, which resulted in an increase of $1,278,830 and capital expenditures of $663,175 on equipment. This was offset by depreciation expense for the twelve months ended December 31, 2019 of $1,218,220, dispositions of $42,084 and a $282,319 reduction relating to foreign exchange recognized on the translation of foreign denominated subsidiaries.
- Goodwill and intangibles assets increased by $860,916 largely as a result of the acquisition of PIGCO which created a $1,705,641 sales backlog offset partially by $577,463 in amortization of the sales backlog and a $336,398 reduction relating to the translation of foreign denominated subsidiaries, being offset by the acquisition of PIGCO which created a $551,461 intangible asset relating to their sales backlog and $49,136 on capitalized expenditures relating to research projects (including $15,731 of capitalized labour).
- The deferred tax asset decreased by $211,312 as a result of increased profitability on the Canadian operations during the twelve months ended December 31, 2019.

Total current liabilities increased by $1,530,167. This increase in aggregate is summarized below:

- Bank overdraft decreased by $369,301 (See the discussion in Section F - Consolidated Statement of Cash Flows);
- Bank operating loan decreased by $265,184 due to timing differences to fund working capital requirements in the Canadian operations;
- The US operating loans increased by $1,163,163 and is the result of the two additional loans created on the close of the PICO acquisition for $1,330,922, being offset by principal repayments of $94,160 and foreign exchange gains of $73,599 which are recognized as part of the translation of foreign denominated subsidiaries. The two loans created on the close of PIGCO have the following details:
    - The Company, through its wholly owned subsidiary PIGCO, has a $430,000 USD loan which on the acquisition date was fully drawn and had a Canadian equivalent of $569,449. Principal repayments of $35,833 USD a month begin on November 1, 2019 and end on October 1, 2020. At December 31, 2019, $358,333 USD is owing on this loan and the Canadian equivalent is $465,403.
    - The Company, through its wholly owned subsidiary Cematrix (USA) Inc., has a $575,000 USD loan which on the acquisition date was fully drawn and had a Canadian equivalent of $761,473. Principal repayments of $95,833 USD a month begin on January 1, 2020 and end on June 1, 2020. At December 31, 2019, $575,000 USD is owing on this loan and the Canadian equivalent of this loan was $746,810.
- Trade and other payables increased by $379,513 largely as a result of the timing difference in payments;

- Current portion of long term debt increased by $524,741 largely as a result of the new $2,800,000 USD BDC loan entered into by the Company on October 1, 2019 to close the PIGCO acquisition. This is offset partially as a result of a unrealized foreign exchange gains on the revaluation of the USD denominated BDC loans.
- Current portion of lease obligations increased by $278,329 primarily as a result of IFRS 16, which became effective on January 1, 2019. IFRS 16 resulted in the accounting for the rental of 3 buildings as capital leases, which at December 31, 2019 resulted in an increase of $321,523 relating to the current portion of finance lease obligations.
- Current portion of the Earn-out Liability is $670,371 USD or $870,678 CAD equivalent and originates from the acquisition of MOS.
    - The first tranche or 12 month period post close ending on May 31, 2019, was estimated at $851,956 USD on an undiscounted basis at December 31, 2018 and is calculated based upon 70% of MOS's EBITDA above $500,000 USD for the 12 month period from June 1, 2018 to May 31, 2019. In 2019, this was revised to $501,221 USD of which $401,983 USD has been paid and the remaining balance of $99,238 USD or $128,890 will be paid subject to certain conditions being met.
    - The second tranche or 12 month period post close ending on May 31, 2020, on a discounted basis is estimated at $571,133 USD or $741,788 and is calculated based upon 65% of MOS's EBITDA above $500,000 USD for the 12 month period from June 1, 2019 to May 31, 2020.

Total non-current liabilities increased by $5,398,224. This increase in aggregate is summarized below:

- Long term debt increased by $2,640,742 largely as a result of the new $2,800,000 USD BDC loan entered into by the Company on October 1, 2019 to close the PIGCO acquisition and draws of $319,445 on an pre-existing equipment loan being offset by repayments of $688,107 and unrealized foreign exchange gains of $173,895 on the revaluation of the USD denominated BDC loans.
- Lease obligations increased by $1,404,890 primarily as a result of IFRS 16, which became effective on January 1, 2019. IFRS 16 resulted in the accounting for the rental of 3 buildings as capital leases, which at December 31, 2019 resulted in an increase of $1,442,475 relating to the non-current portion of finance lease obligations.
- Earn-out Liability is $498,275 USD or $647,160 CAD equivalent and originated from the acquisition of MOS. The Earn-out Liability is a discounted value based upon management's estimate and represents 65% of MOS's EBITDA above $500,000 US for the 12 month period from June 1, 2020 to May 31, 2021.
- The Convertible Note has a face value of $2,500,000 USD and was issued on the acquisition of MOS. On issuance, the Convertible Note was trifurcated into a conversion feature, prepayment feature and a debt host contract. At December 31, 2019 the Convertible Note had an aggregate carrying value of $3,172,220. The decrease of $206,172 is the result of a $138,181 marked to market gain on derivatives and accretion expense of $86,186 being offset by a $154,187 unrealized foreign exchange gain on the host debt contract. The marked to market derivative loss is the result of the fair value of the conversion feature increasing by $1,500,429 which was offset by the increase in the fair value of the prepayment feature by $1,638,610 at December 31, 2019.
- The deferred tax liability increased by $2,039,862 largely as a result of the as a result of the acquisition of PIGCO.

Shareholders' Equity increased by $2,826,227. This increase in aggregate is summarized below:

- Share capital increased by $1,812,030 as a result of 11,500,000 common shares valued at $925,470 issued as part of a non brokered private placement which closed in August 2019 and shares valued at $886,560 issued on the acquisition of PIGCO.
- Contributed surplus increased by $1,611,619 as a result of 12,291,000 warrants, valued at $1,255,240, being issued as a part of a non brokered private placement which closed in August 2019 and non-cash stock based compensation of $464,222 recorded in the period being partially offset by the reclassification of $107,843 to deficit relating to the expiry of options.
- Accumulated other comprehensive income decreased by $451,580 due to the unrealized foreign exchange loss on the translation of MOS, PIGCO and Cematrix USA for the year ended December 31, 2019.
- The Deficit increased by $145,842 due to the loss to common shareholders in the year of $253,685 offset by the reclassification of $107,843 from contributed surplus for options expired in March 2019.

See the Consolidated Statements of Shareholders' Equity included in the Consolidated Financial Statements

I. Consolidated Statements of Cash Flows

Comparison of the Three Months ended December 31, 2019 and December 31, 2018

The cash position of the Company at December 31, 2019 was $656,060 (consisting of cash in the bank of $820,474 net of the bank overdraft of $164,414) compared to a cash position of $119,638 (consisting of cash in the bank of $653,353 net of the bank overdraft of $533,715) at December 31, 2018.

The change in cash in the fourth quarter of 2019 was a decrease of $659,315 as compared to a decrease of $553,572 in the same period of 2018. This change is outlined in the table on the next page:

	Three Months Ended December 31		
	2019	2018	Change
Cash generated from (used in) operating activities			
Before non-cash working capital adjustment	**$ (468,726)**	$ 995,587	$ (1,464,313)
Net change in non-cash working capital items	**562,728**	(1,453,294)	2,016,022
	94,002	(457,707)	551,709
Cash used in investing activities	**(3,612,033)**	(18,795)	(3,593,238)
Cash used in financing activities	**2,891,576**	(107,239)	2,998,815
Foreign exchange effect on cash	**(32,860)**	30,169	(63,029)
Increase (decrease) in cash	**(659,315)**	(553,572)	(105,743)
Cash (cash deficiency), at beginning of period	**1,315,375**	673,210	642,165
Cash (cash deficiency), at end of period	**$ 656,060**	$ 119,638	$ 536,422

- Cash generated from operating activities increased by $551,709.
  - Cash flow before non cash working capital adjustments decreased by $1,464,313 mainly as a result lower revenues and gross margins when compare to the prior year period.
  - Net change in non-cash working capital items was a positive $2,016,022 primarily due to the level of trade receivables generated in the respective periods and the timing of their collection. In the prior year, funds were used to pay vendors that have been stretched.

- Cash used in investing activities increased by $3,593,238.
  - Net cash paid on the PIGCO acquisition on October 1, 2019 was $3,365,181.
  - Property and equipment additions increased by $230,802 primarily as a result of capital expenditures incurred by PIGCO in anticipation of executing on a strong backlog of near term projects.
- Cash generated from financing activities increased by $2,998,815.
  - In 2019 the Company generated $2,891,576 from financing activities. A new $2.8 million USD loan was provided by the BDC, which had a Canadian equivalent of $3,708,040. This was offset by principal repayments of $344,099 on long term debt provided by the BDC, principal repayments of $298,990 on the demand operating loan, principal repayments of $94,160 on US operating loans and $79,215 on lease obligations.
  - In 2018 the Company used $107,239 from financing activities. Principal repayments of $342,945 on the long term debt and $26,220 on finance lease obligations were made during the quarter. This was offset by a $261,926 draw on the demand operating loan.

Comparison of the Year Ended December 31, 2019 and December31, 2018

The cash position of the Company at December 31, 2019 was $656,060 (consisting of cash in the bank of $820,474 net of the bank overdraft of $164,414) compared to a cash position of $119,638 (consisting of cash in the bank of $653,353 net of the bank overdraft of $533,715) at December 31, 2018.

The change in cash for the year ended December 31, 2019 was an increase of $536,422 as compared to an increase of 131,758 in the same period of 2018. This change is outlined in the table below:

	Year Ended December 31		
	2019	2018	Change
Cash generated from (used in) operating activities			
Before non-cash working capital adjustment	**$ 190,637**	$ 552,361	$ (361,724)
Net change in non-cash working capital items	**61,180**	(1,653,358)	1,714,538
	251,817	(1,100,997)	1,352,814
Cash used in investing activities	**(4,027,930)**	(2,924,418)	(1,103,512)
Cash generated from (used in) financing activities	**4,350,635**	4,129,694	220,941
Foreign exchange effect on cash	**(38,100)**	27,479	(65,579)
Increase (decrease) in cash	**536,422**	131,758	404,664
Cash (cash deficiency), at beginning of year	**119,638**	(12,120)	131,758
Cash (cash deficiency), at end of year	**$ 656,060**	$ 119,638	$ 536,422

- Cash generated from operating activities increased by $1,352,814.
  - Cash flow before non cash working capital adjustments decreased by $361,724. The decrease was mainly the result of a one time and unusual credit loss of $455,334 and the timing of the PIGCO acquisition close.
  - Net change in non-cash working capital items was a positive $1,714,538 primarily due to the level of trade receivables generated in the respective periods and the timing of their collection. In the prior year, funds were used to pay vendors that have been stretched.

- Cash used in investing activities increased by $1,103,512.
    - Property and equipment additions increased $629,946 as the Company mainly as a result of the PIGCO acquisition;
    - Net cash paid on acquisitions increased by $557,196. The PIGCO acquisition closed on October 1, 2019 and resulted in a net cash outlay of $3,365,181. The MOS acquisition closed on May 31, 2018 and resulted in a net cash outlay of 2,807,985.
    - Proceeds received on the sale of equipment was $41,000;
    - Intangible asset spending relating to product testing decreased by $42,631. Expenditures of $49,136 (including $15,731 of capitalized internal labour) were incurred in the nine months of 2019 compared to $91,767 (including $26,269 of capitalized internal labour) in 2018;
- Cash generated from financing activities increased by $220,941.
    - In 2019 the Company received $4,350,635 from financing activities. The following sources of financing were received by the Company: A new $2.8 million USD loan from the BDC which had a Canadian equivalent of $3,708,040 used to finance the acquisition of PIGCO, a private placement of 11.5 million units at $0.20 which resulted in net proceeds of $2,141,800, and a drawn down on an pre-existing equipment loan provided by the BDC for $319,445. This was offset by principal repayments of $688,107 on long term debt, a payment of $534,436 on the Earn-out Liability, principal repayments of $265,184 on the demand operating loan, $236,763 on lease obligations and principal repayments of $94,160 on the US operating loan.
    - In 2018 the Company generated $4,129,694 from financing activities. The following sources of financing were received by the Company: a new $1.8 million USD loan from the BDC used to finance the acquisition of MOS, which had a Canadian equivalent of $2,332,620, private placements of 6,361,354 units at $0.20, which resulted in net proceeds of $1,267,745, draws of $1,139,044 on the operating loan, proceeds of $43,500 on the exercise of stock options and government grants of $16,775 were received. This was offset by repayments of $545,132 on long term debt and $81,358 on lease obligations.

J. Liquidity, Capital Resources and Commitments

Liquidity

The Company's liquidity, including obtaining cash resources to finance capital spending to increase its production capacity, is dependent on generating sales, profits, cash flow from operations, maintaining a facility to finance working capital and accessing capital debt facilities through loans or lease financing.

The Company, through its wholly owned subsidiary CEMATRIX Canada, has a $1,500,000 bank operating loan with the Canadian Western Bank ("CWB" or "Bank"). Under the bank operating loan, the Bank will advance up to $1,500,000 based on 75% of trade receivables less any amounts outstanding longer than ninety days at the end of each month and 50% of inventory (up to a maximum $250,000). Based on these restrictions, $1,200,000 of the bank operating loan was available at December 31, 2019 with $940,259 being drawn.

The bank operating loan bears interest at 5.95% and is set at the greater of 4.7% or 2.0% above the CWB prime lending rate.

The bank operating loan has four financial covenants that must be maintained on a consolidated basis:

- Cash flow coverage ratio of not less than 1.25, tested not less than annually. This is a ratio of EBITDA to all interest (paid or accrued) plus the actual principal payment obligations for the trailing fiscal year on all indebtedness for borrowed money and leases. EBITDA will be calculated excluding the extraordinary items (acquisition cost, gain/loss on disposition of assets) and significant non-cash items (stock-based compensation, revaluation of the earn out liability, mark to market adjustments, unrealized foreign exchange gains and losses);

- Debt to tangible net worth ratio not greater than 1.75, tested no less than monthly. This is the ratio of indebtedness for borrowed money and leases divided by the net tangible worth. The definition of debt excludes the convertible debenture and earn-out liability. Tangible net worth is defined as equity and includes the value of the convertible debenture.

- Debt to tangible net worth ratio not greater than 3.00, tested no less than monthly. This is similar to the covenant described above with the exception that value of Goodwill is deducted or excluded from the definition of tangible net worth.

- Current ratio not less than 1.25, tested no less than monthly. This is the ratio of current assets, excluding amounts due from related parties, to current liabilities. Earn-out liabilities due to its contingent nature and vendor payable to MOS, as subordinated, will not be considered as Liabilities.

At December 31, 2019, the Company was not compliant with the debt to tangible net worth ratio of less than 3.00. Prior to year end, on June 4, 2019 the CWB had provided a general tolerance of the covenant breech up to and including December 31, 2019.

The BDC Financing loan 5 and loan 6 have a consolidated fixed charge coverage ratio financial covenant which is tested annually. At December 31, 2019 the Company was not in compliance with this covenant. On the same date, the BDC provided a tolerance for this covenant breech for the period up to and including December 31, 2020.

The Company, through its wholly owned subsidiary MOS, has a $750,000 USD loan which is fully drawn. The loan is repayable on July 31, 2020 and bears an annual interest rate of 14%, payable monthly. At December 31, 2019 the Canadian equivalent of this loan was $974,100.

The Company, through its wholly owned subsidiary PIGCO, has a $430,000 USD loan which is fully drawn. The loan was repayable in 12 equal monthly payments starting November 1, 2019 and does not bear interest. At December 31, 2019 the Canadian equivalent of this loan was $465,403.

The Company, through its wholly owned subsidiary Cematrix (USA) Inc., has a $575,000 USD loan which is fully drawn. The loan is repayable in 6 equal monthly payments starting January 1, 2020 and does not bear interest. At December 31, 2019 the Canadian equivalent of this loan was $746,810.

At December 31, 2019, the Company had Net Working Capital of $3,323,286 compared to $3,771,900 at December 31, 2018, reflecting a decrease in sales for the fourth quarter of 2019 in comparison to the fourth quarter of 2018.

For the year ended December 31, 2019, the Company reported positive cash flow from operations before net change in non-cash working capital items of $190,637 and a positive EBITDA of $1,665,969.

Management continues to closely monitor discretionary costs.

The realization of Net Working Capital, the availability of the CWB bank operating loan and the successful completion of the approximate $38 million in sales contracts and contracts in progress will provide the necessary liquidity to carry the Company's operations through 2020 and 2021. Ongoing liquidity beyond this, is dependent on the Company achieving additional sales and profitable results.

Subsequent to year end, on April 22, 2020 the Company completed a private placement of unsecured convertible debentures raising $5.5 million in gross proceeds. The convertible debentures pay interest at 8% per year and convert into units at $0.40 per unit. Each unit will be comprised of one common share and one-half share purchase warrant. Each share purchase warrant will be exercisable into one common share for a period of 36 months from the date of issuance at an exercise price of $0.45 per common share.

Capital resources

Although the Company has significant production capacity for the foreseeable future, building additional productive capacity in future years for specific purposes is dependent on the Company generating the required funds from operations or new debt or equity financing. In the future, if the Company needs to add production capacity, there is no certainty that additional debt or equity financing will be available to the Company.

The Company defines its capital as the long term debt, the lease obligations and shareholders' equity. The current objective of the Company is to manage its capital through growth in earnings and to re-invest the earnings generated to facilitate the continued growth in the Company, in order to provide an appropriate rate of return to shareholders in relation to the risks underlying the Company's assets. The consolidated capital of the Company, as outlined in Note 28 - Capital management to the Consolidated Financial Statements, was $23,123,264 at December 31, 2019 as compared to $14,756,528 at December 31, 2018 (see Section H. Consolidated Statements of Financial Position for details).

K. Off Balance Sheet Arrangements

There were no off balance sheet arrangements at December 31, 2019 or 2018.

L. Transactions with Related Parties

During the year ended December 31, 2019, the Company incurred legal fees from a firm which employs one of the directors of the Company in the amount of $9,507 ($nil for the year ended December 31, 2018) of which $7,890 is in trade and other payables as at December 31, 2019 (2018 - $nil).

The remuneration of directors and other members of key management personnel during the year were as follows:

		2019		2018
Short term employment benefits	**$**	436,229	$	454,865
Non-cash stock based compensation		222,979		16,280
	$	659,208	$	471,145

M. Critical Accounting Judgments, Estimates and Assumptions

The preparation of the consolidated financial statements in conformity with IFRS requires management to make judgements, estimates and assumptions that affect the reported amounts of assets, liabilities and contingent liabilities at the date of the consolidated financial statements and reported amounts of revenues and expenses during the reporting period. Judgements, estimates and assumptions are continuously evaluated and are based on management's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. However, actual outcomes can differ from these estimates.

The key sources of these uncertainties that have a significant risk of causing material adjustment to the amounts recognized in the consolidated financial statements are discussed below:

(a) *Impairment of non-financial assets*
When an impairment test is performed on an asset or a cash generating unit ("CGU"), management estimates the recoverable amount of the asset or CGU based on its fair value less costs of disposal ("FVLCD") or its value in use ("VIU"). These estimates are based on valuation models requiring the use of a number of assumptions such as forecasts of future cash flows, gross margin, pre-tax discount rate (weighted average cost of capital or "WACC")and perpetual growth rate. These assumptions have a significant impact on the results of impairment tests and on the impairment charge (if required) recorded in the consolidated statement of loss and comprehensive loss.

(b) *Non-cash stock based compensation*
The Company measures the cost of non-cash stock based compensation transactions with employees by reference to the fair value of the equity instruments. Estimating fair value for non-cash stock based compensation transactions requires determining the most appropriate valuation model, which is dependent on the terms and conditions of the grant. This estimate also requires determining and making assumptions about the most appropriate inputs to the valuation model including the expected life, forfeiture rate, volatility and dividend yield of the share option. The Company measures the cost of non-cash stock based compensation transactions with consultants by reference to the fair value of the services to be performed.

(c) *Taxes*
Uncertainties exist with respect to the interpretation of complex tax regulations and the amount and timing of future taxable income. The Company establishes provisions, based on reasonable estimates, for possible consequences of audits by the tax authorities. The amount of such provisions is based on various factors, such as experience of previous tax audits and differing interpretations of tax regulations by the taxable entity and the responsible tax authority. Deferred tax assets are recognized for all unused tax losses to the extent that it is probable that taxable earnings will be available against which the losses can be utilized. Significant estimates are required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and the level of future taxable earnings together with future tax planning strategies.

(d) *Fair value of financial instruments*
The fair value of financial instruments is determined wherever possible based on observable market data. If not available, the Company uses third-party models, independent price publications, market exchanges, investment dealer quotes and valuation methodologies that utilize observable data. Actual values may significantly differ from these estimates.

(e) *Useful life of property and equipment*
Depreciation and amortization are calculated using a systematic and rational basis, which are based upon an estimate of each assets useful life and residual value. The estimated useful life and residual value chosen are the Company's best estimate of such and are based on industry norms, historical experience, market conditions and other estimates that consider the period and distribution of future cash inflows.

(f) *Identification of CGU's*
A CGU is defined as the lowest grouping of integrated assets that generate identifiable cash inflows that are largely independent of the cash inflows of other assets or groups of assets. The allocation of assets into

CGUs requires significant judgment and interpretations with respect to the integration between assets, the existence of active markets, similar exposure to market risks, shared infrastructures, and the way in which management monitors the operations. Management has determined that the appropriate CGU's for the Company are Cematrix Canada and Cematrix USA.

(g) *Business acquisitions*
The Company uses judgment in applying the acquisition method of accounting for business acquisitions and estimates to value identifiable assets and liabilities at the acquisition date. The Company may engage independent third parties to determine the fair value of property, plant and equipment, and intangible assets. Estimates are used to determine cash flow projections, including the period of future benefit, and future growth and discount rates, among other factors. The values placed on the acquired assets and liabilities assumed affect the amount of goodwill recorded on an acquisition.

(h) *Going Concern*
The Company has experienced lower than planned revenue combined with operating losses. Management has assessed and concluded that the going concern assumption is appropriate for a period of at least twelve months following the end of the reporting period. Management applied significant judgement in arriving at this conclusion including:

- The amount of new sales orders and total revenue to be generated to provide sufficient cash flow to continue to fund operations and other committed expenditures;
- The timing of generating those new sales and the timing of the related cash flow;
- The ability to draw upon existing financing facilities to support ongoing operations; and
- The assessment of potentially discretionary expenditures that could be delayed in order to manage cash flows.

Given the judgement involved, actual results may lead to a materially different outcome.

N. Changes in Accounting Policies including Initial Adoption.

New accounting policies

During 2019 the Company adopted new IFRS standards and amendments in accordance with the transitional provisions of each standard as outlined below.

IFRS 16 Leases ("IFRS 16")

Effective January 1, 2019, the Company adopted IFRS 16 Leases (IFRS 16) using the modified rretrospective approach. The new standard requires a lessee to recognize a liability to make lease payments (the lease liabilities) and an asset to recognize the right to use the underlying asset during the lease term (the lease assets) in the statement of financial position.

Comparative information has not been restated and continues to be reported under IAS 17 Leases (IAS 17) The Company used the practical expedient not to reassess whether a contract is or contains a lease at January 1, 2019. Instead, the Company applied IFRS 16 only to contracts previously identified as leases under IAS 17.

The Company also used the following practical expedients to account for leases at January 1, 2019:

- Applied recognition exemptions for operating leases when the underlying asset was of low value or the lease term ends within 12 months. The payments associated with these leases are recognized as an expense.
- Applied a single discount rate to a portfolio of leases with similar characteristics.
- Relied on the Company's assessment of whether leases are onerous immediately before January 1, 2019, and adjusted the lease asset by this amount.
- Excluded initial direct costs when measuring the lease asset.

- Used hindsight to determine the lease term when the contract contained options to extend or terminate the lease.

These policies apply to contracts entered into or changed on or after January 1, 2019.

A contract is a lease or contains a lease if it conveys the right to control the use of an asset for a time period in exchange for consideration. To identify a lease, the Company (1) considers whether an explicit or implicit asset is specified in the contract and (2) determines whether the Company obtains substantially all the economic benefits from the use of the underlying asset by assessing numerous factors, including but not limited to substitution rights and the right to determine how and for what purpose the asset is used.

When assessing the lease term, management considers all facts and circumstances that create an economic incentive to exercise an extension option or to not exercise a termination option. This judgment is based on factors such as contract rates compared to market rates, economic reasons, significance of leasehold improvements, termination and relocation costs, installation of specialized assets, residual value guarantees, and any sublease term.

The Company has elected not to recognize lease assets and lease liabilities for low-value assets or short-term leases with a term of 12 months or less. These lease payments are recognized in expenses over the lease term.

The lease liability is initially measured at the present value of the lease payments that are not paid. The Company elected to not separate non-lease components from lease components and to account for the non-lease and lease components as a single lease component. Lease payments generally include fixed payments less any lease incentives receivable.

The lease liability is discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Company's incremental borrowing rate. The Company estimates the incremental borrowing rate based on the lease term, collateral assumptions, and the economic environment in which the lease is denominated.

The lease liability is subsequently measured at amortized cost using the effective interest method. The lease liability is remeasured when the expected lease payments change as a result of new assessments of contractual options and residual value guarantees.

The lease asset is recognized at the present value of the liability at the commencement date of the lease less any incentives received from the lessor. Added to the lease asset are initial direct costs, payments made before the commencement date, and estimated restoration costs. The lease asset is subsequently depreciated on a straight-line basis from the commencement date to the earlier of the end of the useful life of the lease asset or the end of the lease term. The lease asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The recognized right-of-use assets relate to the buildings. Right-of-use assets were measured at the amount equal to the lease liability, except for onerous contracts.

The change in accounting policy resulted in an increase in property and equipment and lease obligations of $643,632 as follows:

Operating lease commitments disclosed at December 31, 2018	**$**	**1,085,422**
Less: short-term lease exemption		**(285,868)**
Undiscounted lease payments		**799,554**
Discount effect at January 1, 2019		**(155,922)**
	$	**643,632**

Consolidated net income did not change materially as a result of the adoption of IFRS 16.

Future accounting 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 the Company.

O. Financial Instruments

Set out below is a comparison, by category, of the carrying amounts and fair values of all of the Company financial instruments that are carried in the consolidated financial statements and how the fair value of financial instruments are measured.

Other financial liabilities

Other financial liabilities are initially measured at fair value and are subsequently measured at amortized cost using the effective interest rate method, with interest expense recognized on an effective yield basis. Liabilities in this category include bank overdraft, bank operating loan, US operating loan, trade and other payables, loan and long-term debt.

Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Company are recorded at the proceeds received, net of direct issue costs.

Fair values

The fair values of cash and cash equivalents, term deposits, trade and other receivables, bank overdraft, bank operating loan, US operating loan, and trade and other payables approximate their carrying values due to the relatively short periods to maturity of these instruments.

The fair value of the BDC Financing loans approximate its carrying value as the debt rate floats with prime and is representative of market rates offered to the Company.

The fair value of the share acquisition loans has been determined using a market rate of interest.

The fair value of the secured debenture approximates its carrying value as the interest rate is a market rate for similar instruments offered to the Company for similar instruments.

The fair value of the convertible debenture approximates its carrying value as the interest rate used to discount the host debt contract approximates a market rate for similar instruments offered to the Company.

The Company has no plans to prepay any debt instruments prior to maturity.

Fair value represents the price at which a financial instrument could be exchanged in an orderly market, in an arm’s length transaction between knowledgeable and willing parties who are under no compulsion to act. The Company classifies the fair value of the financial instruments according to the following hierarchy based on the amount of observable inputs used to value the instrument

Level 1 – Quoted prices are available in active markets for identical assets or liabilities as of the reporting date. Active markets are those in which transactions occur in sufficient frequency and volume to provide pricing information on an ongoing basis.

Level 2 – Pricing inputs are other than quoted prices in active markets included in level 1. Prices in level 2 are either directly or indirectly observable as of the reporting date. Level 2 valuations are based on inputs, including quoted forward prices for commodities, time value and volatility factors, which can be substantially observed or corroborated in the market place. The embedded derivatives related to the conversion and prepayment features on the convertible note are measured based on level 2.

Level 3 – Valuations in this level are those with inputs for the assets or liabilities that are not based on observable market date. The earn-out liability is measured at level 3.

There were no transfers between level 1, 2 and 3 inputs during the year.

Risk management

The Company's activities are exposed to a variety of financial risks: interest rate risk, credit risk, liquidity risk and foreign exchange risk. The Company's overall risk management program focuses on the unpredictability of financial and economic markets and seeks to minimize potential adverse effects on the Company's financial performance. Risk management is carried out by financial management in conjunction with overall Company governance.

Interest Rate Risk

The BDC Financings, which had a balance of $6,280,498 outstanding at December 31, 2019, the bank operating loan, which had a balance at December 31, 2019 of $940,259, and the US operating loan 1, which had a balance at December 31, 2019 of $974,100 are subject to floating market rates. Based on the floating rate debt outstanding as at December 31, 2019, a 1% increase/decrease in interest rates would result in a decrease/increase in net loss attributable to common shareholders of approximately $55,000.

Credit Risk

The Company is responsible for reviewing the credit risk for each customer before standard payment and delivery terms and conditions are offered. The Company review consists of external ratings, when available, and in some cases bank and trade references. Management has established a credit policy under which new customers are analyzed for creditworthiness before the Company extends credit. The Company monitors its trade and other receivables aging on an ongoing basis as part of its process in managing its credit risk.

The Company also manages credit risk related to trade and other receivables on a consolidated basis whereby the aggregate exposure to individual customers is reviewed and their credit quality is assessed.

Financial instruments that subject the Company to credit risk consist primarily of cash and cash equivalents, term deposits, trade receivables and the share acquisition loans. The Company's cash is held with large established financial institutions. The Company manages credit risk using credit approval and monitoring practices. The credit risk on share acquisition loans is minimal as the Company can cancel the common shares issued to these individuals in the event of non payment. At December 31, 2019, 16 customers accounted for approximately 75% of trade receivables (at December 31, 2018, 6 customers accounted for approximately 51% of trade receivables). For the year ended December 31, 2019, 12 customers each accounted for over 58% of revenue compared to 3 customers accounted for 6% of revenue. At December 31, 2019, the Company had $820,474 of cash and cash equivalents (2018 - $653,353), an $80,000 term deposit (2018 - $80,000) and $38,071 (2018 - $43,874) of fair valued share acquisition loans that are outstanding with two officers, and a former officer of the Company.

Liquidity Risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations. Liquidity risk management involves maintaining sufficient cash and cash equivalents and the availability of working capital financing.

The table below summarizes the maturity profile of the Corporation's financial liabilities at December 31, 2019 and 2018 based on contractual undiscounted payments.

	Less than 1 year	1 to 2 years	2 to 6 years	Total
As a December 31, 2019				
Bank overdraft	**$ 164,414**	**$ -**	**$ -**	**$ 164,414**
Bank operating loan	**940,259**	**-**	**-**	**940,259**
US operating loan	**2,186,313**	**-**	**-**	**2,186,313**
Trade and other payables	**2,372,553**	**-**	**-**	**2,372,553**
Long-term debt	**1,222,148**	**1,276,356**	**4,781,994**	**7,280,498**
Lease obligations	**446,001**	**449,045**	**1,077,126**	**1,972,172**
Earn-out liability	**870,678**	**647,160**	**-**	**1,517,838**
Convertible note	**-**	**3,172,220**	**-**	**3,172,220**
	$ 8,202,366	**$ 5,544,781**	**$ 5,859,120**	**$ 19,606,267**

	Less than 1 year	1 to 2 years	2 to 6 years	Total
As at December 31, 2018				
Bank overdraft	$ 533,715	$ -	$ -	$ 533,715
Bank operating loan	1,205,443	-	-	1,205,443
US operating loan	1,023,150	-	-	1,023,150
Trade and other payables	1,993,040	-	-	1,993,040
Long-term debt	697,407	2,004,233	1,413,375	4,115,015
Lease obligations	167,672	118,771	2,510	288,953
Earn-out liability	1,051,772	594,304	533,954	2,180,030
Convertible note	-	-	3,378,392	3,378,392
	$ 6,672,199	$ 2,717,308	$ 5,328,231	$ 14,717,738

Foreign Exchange Risk

Foreign exchange risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The Company's exposure relates to balances denominated in US dollars ("USD") and the operations of its US subsidiary which are predominantly in USD. The Company does not hedge these items as the timing of related transactions is not certain.

As at December 31, the following balances were denominated in USD:

	2019	2018
Cash and cash equivalents	**$ 583,193**	$ 477,244
Trade and other receivables	**$ 1,718,472**	$ 1,355,817
Prepaid expenses and deposits	**$ 101,439**	$ 62,916
Trade and other payables	**$ 851,655**	$ 1,148,915
US operating loan	**$ 933,333**	$ 750,000
Long term debt	**$ 4,225,000**	$ 1,650,000
Finance lease obligations	**$ 918,177**	$ 49,242
Earn-out liability	**$ 1,168,646**	$ 1,598,028
Convertible note	**$ 2,442,424**	$ 2,221,772

The Company's primary foreign exchange sensitivity is in relation to movements of the USD against the Canadian dollar. Based on USD balances as at December 31, 2019 a 1% increase/decrease of the USD against the Canadian dollar would result in an increase/decrease in total comprehensive loss of approximately $87,000.

P. Disclosure of Outstanding Share Data

As at December 31, 2019 and April 27, 2020, the following is a description of the outstanding equity securities and convertible securities previously issued by the Company

	Authorized	Outstanding as at December 31, 2019	Outstanding as at April 27, 2020
Voting or equity securities issued and outstanding	Unlimited Common Shares	59,286,019 Common Shares	60,433,531 Common Shares
Securities convertible or exercisable into voting or equity securities – stock options	Stock options to acquire up to 10% of outstanding Common Shares	Stock options to acquire 4,820,000 Common Shares at an exercise price at between \$0.18 - \$0.43	Stock options to acquire 4,820,000 Common Shares at an exercise price at between \$0.18 - \$0.43
Securities convertible or exercisable into voting or equity securities – share purchase warrants	As approved by the board	Share purchase warrants to acquire 15,554,177 Common Shares at an exercise price at between \$0.30 - \$0.35	Share purchase warrants to acquire 14,406,665 Common Shares at an exercise price at between \$0.30 - \$0.35
Securities convertible or exercisable into voting or equity securities – units	As approved by the board	Nil	Units to acquire 1,100,000 units at a price of \$0.40. Each unit is comprised to one Common Share and a half share purchase warrant to acquire Common Shares at \$0.45

Q. Outlook

Management continues to be extremely positive on the outlook for the Company for 2020 and the foreseeable future. Fortunately, the business of the CEMATRIX Group of companies has been considered an essential business, so the pouring of cellular concrete throughout North America has not been interrupted. Furthermore, during times of recession, governments tend to invest in infrastructure projects as a means to get Americans and Canadians working again and this has already been the general message from various government leaders.

The acquisitions completed in the last two years established CEMATRIX as the clear leader in our industry, which from a micro economic perspective would have allowed us to increase our market share, cash flow and profitability regardless of the changes in the macro economic environment. The company's sustainability increased substantially was evident in the positive trend line on top line revenues and significant improvements to cash flow over the past 2 years.

This trend is continuing into 2020 / 2021 as the Company recently announced that it has a back log of over $78.5 million in projects of which $38 million are currently scheduled to be completed in 2020.

Notwithstanding these facts, the COVID-19 situation could result in a delay of some projects. The important part of this possibility is that the projects are not lost, just delayed.

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Form 51-102F1 - Management's Discussion & Analysis
For the Year Ending December 31, 2019

Appendix A – Forward Looking Statements

The forward-looking statements in the MD&A for the year ending December 31, 2019 are outlined below:

General

There are a number of statements in the MD&A which refer to "expect", "expects", "expected", "believes", "should", "anticipated" and "will".

The foregoing statements contains forward-looking statements which are based on sales forecasts prepared for 2019; sales forecasts include work which is under contract or Verbally Awarded for 2019, as well as probability adjusted forecasts for projects on which the Company has placed or will place bids in the coming year, where the probabilities applied to the sales forecast are based on management's assessment of the particular project based on historical experience and the stage the project is in the sales cycle. There are a number of risks that could affect these assumptions which include: contracted work is delayed; the failure of 2019 sales to materialize, because of project delays or cancelations or because CEMATRIX's cellular concrete is not specified into projects, management's assumptions in applying probabilities to the various projects in the sales forecast are incorrect, and product acceptance in new markets takes longer than anticipated resulting in reduced sales.

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Appendix B – Definitions

Sales Pipeline:
The Company's sales pipeline is defined as the total forecasted dollar amount of those future projects that CEMATRIX has been contacted by engineering firms, or owners, or contractors for design assistance (which could include thermal modelling), a quote, or both. The sales pipeline does not include the dollar value of contracted sales; or the dollar value of sales, where volumes have not been determined by the designers; or the dollar value of sales that have been lost for various reasons, including that the proposed project has been cancelled, lost to an alternative product or lost to a competitor. The sales pipeline is updated when changes in the status of a project becomes known to CEMATRIX. The sales pipeline includes projects from the current and future years and grows with the continued acceptance of the product throughout the Company's market territory, which currently includes significant parts of Canada and parts of the U.S.

Cost of Sales:
Direct costs related to the production of cellular concrete, including materials and labour; direct and indirect variable costs related to the production of cellular concrete; and fixed costs related to the production of cellular concrete, including depreciation related to the equipment used in the production of cellular concrete.

Gross Margin:
The profit after cost of sales is deducted from revenue.

Gross Margin Percentage:
The percentage of the gross margin as a percentage of revenue.

Operating Expenses:
Represents costs not directly related to the production of cellular concrete, including general and administrative, sales and marketing and technology development.

Operating Income (Loss):
Income (loss) before non-cash stock based compensation, finance costs and other miscellaneous items and taxes.

Net Working Capital:
The sum of trade and other receivables, inventory and prepaid expenses and deposits minus trade and other payables.

Ready Mix
This refers to pre-designed cement slurry which is delivered by a ready mix supplier.

EBITDA
Earnings before interest, taxes, depreciation, amortization, non cash stock based compensation, non cash unrealized foreign exchange gains (loss), non cash revaluation of derivatives, non cash revaluation of earn-out liabilities, gain (losses) on the acquisition or dispositions of assets and business acquisition costs.

Funds Flow from Operations
Cash generated from (used in) operating activities before net change in non-cash working capital items.