



Management's Discussion and Analysis
For the Year ended December 31, 2019

PRESIDENT'S UPDATE

The Company is pleased to provide an update to its shareholders on its financial results and recent activities related to its operations.

The Company has three systems that can be used independently or in combination in horizontal wellbores:

- 1) the High Angle Reciprocating Pump ("HARP™");
- 2) the Raise Efficient Artificial Lift ("REAL™") Horizontal Separator
- 3) the Horizontal Artificial Recovery Technology ("HART™").

During 2019, the Company continued to grow its technology footprint, particularly its High Angle Reciprocating Pump ("HARP™") product line. The commercialization of this product line has been proven to be beneficial in new wells and in older wells. The second half of 2019 proved to be the most successful period to date with particularly good results in the Grande Prairie Charlie Lake formations. The Company also broke ground with some major E & P companies and started to record run life on its HARP™ exceeding industry norms.

The Company also saw the install of its first REAL™ horizontal separator system with a successful deployment in a Cardium well bore. Raise has had high interest from a number of operators for this technology and we will continue to pursue these during 2020.

In January 2020, the Company added 2 highly experienced sales and operational engineers, Daryl Winnicky, P. Eng. and Aaron Roche, P. Eng., each have extensive practical experience with all facets of production, reservoir and exploitation engineering for major, junior and small E & P operators. Their experience and knowledge of the technical and financial aspects of the operating companies have already proven a factor in improving the Company's sales and operational offering to be in line with changing customer challenges.

The Company added new board members Al Stark and Rick McHardy who also bring a new dimension to Raise from an operational and strategic direction. The Company has also been working diligently to define and identify a partner for its HART™ technology throughout the last year and in January 2020 Stifel FirstEnergy was engaged to commence a strategic alternatives process. Although the process has slowed over the last few weeks due mainly to travel restrictions and the need for physical distancing, the Company anticipates the process will begin again as soon as we return to a form of normal business.

For the year ended December 31, 2019, total revenue earned on the sales of the Company's HARP™ increased 229% to \$1,100,624 compared to \$334,791 during the year ended December 31, 2018.

INDUSTRY OUTLOOK

The recent downturn in oil prices resulting from significantly reduced demand due to the Covid-19 pandemic and recent OPEC actions is anticipated to significantly reduce oil well drilling in North America in 2020. However, in a lower price environment, producers tend to put more emphasis on production optimization activities to mitigate their natural production declines. The Company's HARP™ pump and REAL™ horizontal gas separator are products designed to increase well production and reduce operating costs in existing producing wells.

HARP™ (High Angle Reciprocating Pump)

Canada

The Company continued to grow its footprint with the HARP™ technology in 2019. Due to the recent price differentials and oil surplus, it is difficult to project sales with any certainty. However, the Company is focusing its efforts on how to sell its products and services as it believes the industry approach will be different for some time due to less face to face

interactions, physical distancing and more reliance on conference calls and video communications. New initiatives will include targeted advertising with emphasis on social media as well as educational webcasts and video postings. Strategic pricing to target operating budgets and increased awareness on other aspects and features that relate to operational issues and cost savings for the customers is also being emphasized. As disclosed in the last press release dated April 6, 2020, the Company will continue to focus on the reduction of internal costs where and when possible along with application for any government assistance as may be offered at the federal and provincial level.

USA

The USA is forecasting a significant reduction in sales and services as a result of the current economic environment. Raise will be collaborating with its partner Endurance Lift Solutions (“ELS”) on its marketing and sales approach and sharing its initiatives with them. Raise and ELS continue to make progress on a new multi-year distribution agreement which will provide both parties with the ability to accelerate development of Raise’s products and provide Raise with a long-term footprint in the United States.

REAL™ (Raise Efficient Artificial Lift)

The first installation of a REAL™ system in the fourth quarter of 2019 has provided the Company with valuable information. While the installation was successful and the REAL™ is still in service, the Company has identified refining improvements to this product. These changes have been implemented and version 2 is now ready to be installed in the next REAL™ candidate well. Although a number of operators did commit to installs in the second quarter of 2020, the Company expects that these may be delayed until the last quarter of 2020.

HART™ (Horizontal Artificial Recovery Technology)

The Company continues to pursue all available paths to bring this technology to the market and will provide shareholders with updates as they occur.

For the year ended December 31, 2019, the Company recorded a full impairment of the HART™ development costs capitalized to date of \$5,829,892 and goodwill of \$259,932. The impairment was a result of applying a value-in-use calculation using cash flow projections covering a five-year period, consistent with management’s internal budgeting and forecasting period, and applying a terminal value thereafter. As previously stated, the Company requires a partner to assist in development and commercialization of the HART™ for deeper and higher-pressure wellbores. The difficulties being experienced by the oil and gas industry over the last few years have resulted in the Company being unable to find a development and commercialization partner to date. The key assumptions used in the impairment calculation assume a partner is found in late 2020 resulting in commercialization of the HART™ system beginning in late 2022.

UPCOMING

All stakeholders are encouraged to view our regular corporate progress through the Company’s LinkedIn Profile and its website.

The Board of Directors and Management would like to thank all shareholders for their support and encouragement as the Company navigates through this extraordinary period.



Eric Laing
President and Chief Executive Officer

MANAGEMENT'S DISCUSSION AND ANALYSIS

This Management's Discussion and Analysis ("MD&A") should be read in conjunction with the audited financial statements of Raise Production Inc. ("Raise Production" or the "Company") as at and for the years ended December 31, 2019 and 2018.

Information in this MD&A and the financial statements has been presented in Canadian dollars. The financial statements for the years ended December 31, 2019 and 2018 have been prepared in accordance with International Financial Reporting Standards ("IFRS").

This MD&A contains forward-looking information. Readers are referred to the advisories concerning such matters under the heading "Forward-Looking Information Disclaimer" below.

This MD&A is dated April 28, 2020. Additional information concerning Raise Production can be found on the SEDAR website at www.sedar.com.

ABOUT RAISE PRODUCTION

Raise Production is an independent Canadian public company, the principal business of which is utilizing its proprietary products to enhance and increase ultimate production in both conventional and unconventional horizontal oil and gas wells.

The Company is considered to be a development stage enterprise, as it has recently begun the commercialization process of its Raise Efficient Artificial Lift ("REAL™") system, which includes the High Angle Reciprocating Pump ("HARP"), and has not yet generated revenue from its initially planned principal business, the sale and distribution of its proprietary Horizontal Artificial Recovery Technology ("HART™" or the "System"), which was previously referred to as the Horizontal Wellbore Production System by the Company. Similar to other development stage enterprises, the recoverability of amounts shown for product development and commercialization are dependent on many factors, including the ability of the Company to obtain necessary financing for its planned activities. Failure to obtain the necessary financing would impact the Company's ability to realize its assets and discharge its liabilities in the normal course of business. See "Operational and Business Risks" below.

FORWARD-LOOKING INFORMATION DISCLAIMER

The global impact of COVID-19 as well as the recent decline in oil prices in Canada and the United States have resulted in significant uncertainty as to the health of the global economy and specifically the oil and gas industry. The potential impact that these events will have on the Company's future sales and financial results cannot be reasonably estimated at this time. However, the influence of these recent developments has impacted the Company's customers' capital and operating spending budgets, which have resulted in a negative effect on the Company's short-term sales. The Company is currently implementing actions to preserve its cash position while maintaining its ability to effectively service and supply its customers.

Certain information included in this MD&A constitutes forward-looking statements under applicable securities legislation. Forward-looking statements or information typically contain or can be identified by statements that include words such as "anticipate", "assume", "based", "believe", "can", "continue", "depend", "estimate", "expect", "forecast", "if", "intend", "may", "plan", "project", "propose", "result", "upon", "will", "within" or similar words suggesting future outcomes or statements regarding an outlook. Forward-looking statements or information in this document include but are not limited to: estimates and source of funds of future product development and capital and operating expenditures, capital raising, the availability of credit, the Company's credit risk, business strategy and short and long term strategic objectives, continued usage of service providers and

contractors, estimates regarding current cash resources and cash flow, anticipated sales, commercialization plans and the timing thereof, the results and timing of product testing, operating and other costs, the effect of oil and natural gas market conditions on the Company, financial results and the impacts of International Financial Reporting Standards on these statements.

Such forward-looking statements or information are based on a number of assumptions that may prove to be incorrect. Assumptions have been made regarding, among other things: commercialization of products and operations, the ability of Raise Production to obtain required capital to finance its product development, the successful completion of product testing and timing thereof, the ability to adequately protect proprietary information and technology from its competitors, the ability to obtain partnering opportunities, the ability to attract and retain key personnel and key collaborators, the availability of skilled labour, services and equipment, general economic and financial market conditions, the legislative and regulatory environment of the jurisdictions where the Company carries on business, and the ability to successfully compete in the targeted markets.

The forward-looking statements contained in this MD&A are made as of the date hereof and Raise Production does not undertake any obligation to publicly update or revise any of the included forward-looking statements, except as required by applicable Canadian securities law. Forward-looking statements are based upon the opinions and expectations of management of Raise Production as at the effective date of such statements and, in some cases, information supplied by third parties. Although Raise Production believes that the expectations reflected in such forward-looking statements are based upon reasonable assumptions and that information received from third parties is reliable, it can give no assurance that those expectations will prove to have been correct. Forward-looking statements are subject to certain risks and uncertainties that could cause actual events or outcomes to differ materially from those anticipated or implied by such forward-looking statements, including but not limited to those described under the headings "*Operational and Business Risks*" and "*Financial Instruments*". Accordingly, readers should not place undue reliance upon the forward-looking statements contained in this MD&A and such forward-looking statements should not be interpreted or regarded as guarantees of future outcomes.

RESULTS OF OPERATIONS

Statement of Operations

	December 31, 2019	December 31, 2018	December 31, 2017
Revenue from contracts with customers	\$ 1,100,624	\$ 334,791	\$ 330,594
Cost of sales	705,613	270,037	258,838
Gross margin	395,011	64,754	71,756
Other Income	21,458	26,949	25,611
Expenses			
Goodwill and intangible asset impairment	6,089,824	–	–
General and administration	3,043,618	1,960,083	1,576,892
Depreciation and amortization	247,495	91,634	100,703
Stock-based compensation	241,553	352,130	330,786
Research expenses	171,441	156,742	98,790
Inventory impairment	156,874	74,574	–
Finance costs	94,820	4,306	7,840
	10,045,625	2,639,469	2,115,011
Net loss	\$ (9,629,156)	\$ (2,547,766)	\$ (2,017,644)
Net loss per share – basic and diluted	\$ (0.08)	\$ (0.02)	\$ (0.02)

Segmented Information

The Company's segmented information disclosure is based on reportable operating segments according to the products and services each segment provides.

The patent pending Raise Efficient Artificial Lift ("REAL") system segment provides an artificial lift solution for the build and vertical section of a horizontal wellbore. REAL addresses the production challenges and downtime associated with currently available artificial lift technology, particularly in high gas to oil ratio wells. REAL includes the High Angle Reciprocating Pump ("HARP") with the addition of certain downhole tools, such as horizontal separation, sand control, velocity flow tubes and pack off assemblies for flow control. The initial sales to date for this segment have included the HARP only.

The patented Horizontal Artificial Recovery Technology ("HART") segment provides an artificial lift solution for the lateral section of a horizontal wellbore which consists of multiple pumps running in parallel along the horizontal wellbore to access trapped or stranded reserves and draw fluid from the toe area of the wellbore. This product is in the development stage and has not yet generated revenue from commercial sales to external customers. An impairment loss was recognized for the year ended December 31, 2019 for all costs incurred for this segment that were capitalized as HART development costs beginning April 1, 2013 consisting of the value of goodwill of \$259,932 and capitalized development costs since April 1, 2013 of \$5,829,892.

The Corporate segment includes interest earned on cash balances and costs related to administrative activities that support both the REAL and HART segments.

Revenue

	2019	2018	% change
REAL™ segment revenue	\$ 1,100,624	\$ 334,791	229%

The increase in REAL™ revenue of \$765,833 or 229% for the year ended December 31, 2019 compared to the prior year is due to increased sales of the Company's HARP™ in the Canadian and United States markets. Canadian sales increased by \$458,058 or 181% year over year due to successful installations which have resulted in repeat orders from existing customers as well as interest from new customers and the Company being able to increase its HARP™ sales prices as it moves from the prototype phase. USA sales increased by \$307,775 or 375% year over year due to successful installations of the Company's re-designed HARP™ Generation 2 occurring in the USA market resulting in Endurance Lift Solutions ("ELS") ordering 20 complete HARP's™ (including ten HARP's™ with upgraded materials for deeper and more corrosive wellbores) and 25 additional HARP™ assemblies in 2019 in order to meet its increasing demand.

Cost of Sales

	2019	2018	% change
REAL™ segment cost of inventory	\$ 668,453	\$ 239,210	179%
Warranty provision	37,160	30,000	24%
Other cost of inventory	–	827	(100%)
Total	\$ 705,613	\$ 270,037	161%

The increase in REAL™ cost of inventory of \$429,243 or 179% for the year ended December 31, 2019 compared to the prior year is due to increased sales of the Company's HARP™ in the Canadian and USA markets and the increased cost of the HARP's™ with upgraded materials for the deeper and more corrosive wellbores in the USA market as noted above.

In addition, the Company has recognized an additional provision of \$37,160 for the year ended December 31, 2019 compared to \$30,000 in the prior year for potential maintenance warranty claims related to the commercialization of its HARP™.

Gross Margin

	2019	2018	% change
Gross margin	\$ 395,011	\$ 64,754	510%

The Company's gross margin as a percentage of total revenue was 36% during the year ended December 31, 2019 compared to 20% in the prior year. Excluding the ELS inventory sales, which earn minimal margin until the Company receives its 50% portion of completed ELS sales, and the warranty provision of \$37,160 the year ended December 31, 2019, the Company's gross margin as a percentage of total revenue was 48% compared to 28% in the prior year. The increase in Canadian gross margin is due to increased HARP™ sales prices in addition to reduced manufacturing costs.

Other Income

	2019	2018	% change
Interest income	\$ 12,390	\$ 26,649	(53%)
Other income	9,068	300	2,923%
Total	\$ 21,458	\$ 26,949	(20%)

The \$14,259 decrease in interest income for the year ended December 31, 2019 compared to the same period in 2018, is the result of the Company's lower cash balance during 2019 compared to the prior year. The Company does not earn any interest in its investment account for balances less than \$1 million.

The \$8,768 increase in other income is the result of additional income earned in 2019 on the sale of unusable shop metal, manufacturing requests from external vendors and shipping charge recoveries.

Goodwill and Intangible Asset Impairment

	2019	2018	% change
HART™ development costs impairment	\$ 5,829,892	\$ –	100%
HART™ goodwill impairment	259,932	–	100%
Total	\$ 6,089,824	\$ –	100%

In accordance with IAS 36 "*Impairment of Assets*", the Company is required to assess its HART™ cash-generating unit ("CGU") by comparing its carrying amount with its recoverable amount (the "Impairment Test") if there is any indication of impairment at the end of each reporting period or, at a minimum, on an annual basis. The HART CGU consists of the Company's horizontal pump technologies, which includes HART development costs, patents, licenses, rights and goodwill (as it arose entirely from the acquisition of the horizontal pump technology).

The recoverable amount of this CGU was determined based on a value-in-use calculation using cash flow projections covering a five-year period, consistent with management's internal budgeting and forecasting period, and applying a terminal value thereafter. The cash flow projections incorporate management's best estimates of revenue, gross profit, administration expenditures and capital expenditures.

In assessing value-in-use, the Company reviewed the broad categories of risk within the CGU being general uncertainties related to the oilfield service industry (activity, competition, oil price, etc.) and those specifically related to the development and commercialization of the horizontal pump technology. Although the Company believes its horizontal pump technology remains key to its long-term success, further development has been on hold since mid-2017. The Company requires a partner to assist in development and commercialization of the HART for deeper and higher-pressure wellbores. The difficulties being experienced by the oil and gas industry over the last few years have resulted in the Company being unable to find a development and commercialization partner to date. The key assumptions used in the Impairment Test assume a partner is found in late 2020 and funding, development and testing occurs in 2021 and 2022, resulting in commercialization of the HART system beginning in late 2022.

As a result of the delay in commercialization of the HART system, calculating the present value of the projected five years of cash flows with a terminal value assuming 1% growth in perpetuity and an after-tax discount rate of 15.4% resulted in a negative value for the HART CGU at December 31, 2019 and

therefore, an impairment was recognized for the carrying amount of the HART CGU in the Statement of Loss and Comprehensive Loss of \$6,089,824, including goodwill of \$259,932.

General and Administration

	2019	2018	% change
Sub-contracted and consulting fees	\$ 1,198,803	\$ 90,082	1,231%
Salaries and benefits ⁽¹⁾	704,754	597,118	18%
Salaries and benefits ⁽²⁾	648,520	578,581	12%
Legal	152,949	95,069	61%
Facilities	82,488	202,715	(59%)
Audit and accounting services	67,912	95,163	(29%)
Insurance	45,348	44,294	2%
Travel & meal expenses	23,030	62,453	(63%)
Public company costs	23,843	29,230	(18%)
Automotive expenses	4,859	21,504	(77%)
Other	91,112	143,874	(37%)
Total	\$ 3,043,618	\$ 1,960,083	55%

(1) HARP commercialization

(2) Administration

Overall general and administration expenses increased \$1,083,535 or 55% for the year ended December 31, 2019 compared to 2018. Significant changes within the general and administration expenses consisted of:

- a \$1,108,721 increase in sub-contracted and consulting fees due to the acquisition of 1955554 Alberta Ltd., an arms-length private consulting company, on September 30, 2019 for total consideration of \$1,400,000 which was satisfied through the issuance of secured convertible debentures and resulted in a one-time \$1.1 million consulting fee being recognized;
- a \$107,637 increase in salaries and benefits for HARP™ commercialization mainly due to the addition of four new employees in the areas of Commercial Sales, Field Operations and Internal Manufacturing during the third and fourth quarters of 2018 to assist in the commercialization of the HARP™;
- a \$69,939 increase in salaries and benefits for Administration mainly due to the addition of one new employee to assist with procurement and inventory control in the third quarter of 2018; and
- a \$57,880 increase in legal expenses mainly due to an increase in patent application legal fees related to the REAL™ system being expensed during the year ended December 31, 2019 compared to the prior year; offset by
- a \$120,226 decrease in facilities expense and a \$16,645 decrease in automotive expenses due to the adoption of IFRS 16 – Leases on January 1, 2019 requiring the Company's office and vehicle lease payments to be capitalized and reported on the Statement of Financial Position with only the monthly operating expense payments reported in General & Administration expense as discussed above; and
- a \$39,423 decrease in travel and meals expenses due to the fewer trips to the United States required in 2019.

Depreciation and Amortization

	2019	2018	% change
Depreciation of right-of-use assets	\$ 174,532	\$ –	100%
Depreciation of fixed assets	72,963	91,634	(20%)
Total	\$ 247,495	\$ 91,634	170%

The 170% increase in depreciation and amortization for the year ended December 31, 2019 compared to the prior year is mainly due to the adoption of IFRS 16 – *Leases* on January 1, 2019 requiring the Company to capitalize its lease contracts as Right-of-Use (“ROU”) assets and report the amortization of these assets as depreciation and amortization expense rather than as lease payments included in general and administration expenses.

Stock-based Compensation

	2019	2018	% change
Stock-based compensation	\$ 241,553	\$ 352,130	(31%)

Stock-based compensation expense relates to options granted to the Company’s management, employees, consultants and directors that are not directly related to the HART™ development and is recognized over the vesting period of the options. Stock options granted to individuals directly related to the HART™ development are capitalized and included in the carrying value of the HART™. The Company uses the Black-Scholes model to calculate the fair value of the options at the time of grant.

The 31% decrease in the stock-based compensation expense for the year ended December 31, 2019 compared to the prior year is mainly due to the timing of the stock option grants, the vesting period associated with each option grant and any conditions associated with the vesting period. The 3,000,000 stock options issued in 2019 do not vest until the Company’s 10-day volume weighted average trading price has equaled or reached \$0.18 per share resulting in a lower fair value for these options compared to prior stock option issuances which did not contain a market price vesting provision.

The Company granted 3,000,000 stock options during the year ended December 31, 2019 and 1,050,000 stock options during the year ended December 31, 2018.

The Company has 5,014,999 options exercisable at December 31, 2019 compared to 4,841,667 at December 31, 2018.

Research Expenses

	2019	2018	% change
Research expenses	\$ 171,441	\$ 156,742	9%

Research expenses for the year ended December 31, 2019 consisted of expenditures incurred for the design and development of the Company’s patent pending downhole tools that form part of the REAL™ system. The expenditures mainly consisted of an internal engineer’s salary and benefits as well as testing of the REAL™ system. The 9% increase in research expenses for the year ended December 31, 2019 is due to an increase in REAL™ testing expenses compared to the prior year.

Inventory Impairment

	2019	2018	% change
Inventory impairment	\$ 156,874	\$ 74,574	110%

At December 31, 2019, the Company recorded impairment of \$110,257 of HART™ inventory as a result of the impairment of the HART™ CGU discussed above. Approximately \$46,617 in inventory parts developed in conjunction with the Company's first-generation HARP™ that are no longer usable were also written off during the year ended December 31, 2019. During the year ended December 31, 2018, the Company wrote off \$74,574 of inventory related to the first generation HARP™ development that is no longer usable.

Finance Costs

	2019	2018	% change
Convertible debenture interest expense	\$ 34,784	\$ –	100%
Accretion on lease liabilities	34,128	–	100%
Accretion on convertible debenture	22,951	–	100%
Bank and other interest charges	2,957	4,306	(31%)
Total	\$ 94,820	\$ 4,306	2,102%

The 2,102% increase in finance costs for the year ended December 31, 2019 compared to the prior year is due to the actual interest paid on and accretion of the convertible debentures for the fourth quarter of 2019 as well as the adoption of IFRS 16 – Leases on January 1, 2019 requiring the Company to capitalize its lease contracts and report interest expense and accretion expense on the lease liability included as finance costs rather than as lease payments included in the general and administration expense.

Deferred Income Taxes

The Company has not recognized any deferred income tax asset given the uncertainty with its future operations. At December 31, 2019, the Company has a non-capital loss carry forward balance and deductible scientific research and development expenditures totaling approximately \$21.8 million.

Net Loss and Net Loss Per Share

The net loss for year ended December 31, 2019 was \$9,629,156, compared to a net loss of \$2,547,766 for the year ended December 31, 2018.

The increase in the net loss of \$7,081,390 or 278% for the year ended December 31, 2019 compared to the prior year is mainly the result of a goodwill and intangible asset impairment loss of \$6,089,824 as at December 31, 2019 and the acquisition of 195554 Alberta Ltd., an arms-length private consulting company, on September 30, 2019 for total consideration of \$1,400,000 which was satisfied through the issuance of secured convertible debentures and resulted in a one-time \$1,100,000 consulting fee being recognized.

The \$0.06 increase in the net loss per share of \$0.08 for the year ended December 31, 2019 compared to \$0.02 for the year ended December 31, 2018 is a direct result of the increase in the net loss discussed above.

Cash Used in Operating Activities

Cash flows used in operating activities for the year ended December 31, 2019 of \$1,779,407 are 20% lower than cash flows used in operating activities for the year ended December 31, 2018 of \$2,218,194. This decrease is due to an increase in sales activity in 2019 resulting in a \$330,257 increase in gross margin as well as a \$188,536 change in non-cash working capital between the periods due to the timing of receipts of trade receivables and timing of payments of trade payables and accrued liabilities.

TOTAL ASSETS

	2019	2018	2017
Total assets	\$ 2,747,402	\$ 9,514,682	\$ 8,046,784

Total assets at December 31, 2019 of \$2,747,402 are 71% lower than total assets at December 31, 2018. This decrease is the result of a goodwill and intangible asset impairment loss of \$6,089,824 recognized as at December 31, 2019 as well as a \$971,417 reduction in cash.

Total assets at December 31, 2018 of \$9,514,682 are 18% higher than total assets at December 31, 2017. This increase is mainly due to the increase in cash of \$1,276,362 due to the closing of an equity financing in June 2018 and an increase in inventory of \$377,829 related to the commercialization of HARP™.

TOTAL NON-CURRENT LIABILITIES

	2019	2018	2017
Total non-current liabilities	\$ 2,309,630	\$ 127,473	\$ –

Non-current liabilities increased by \$2,182,157 at December 31, 2019 compared to December 31, 2018 due to the issuance of \$2,300,000 secured convertible debentures at September 30, 2019 (\$2,067,243 was allocated to debt and \$232,757 to equity pre-issuance costs) as well as the adoption of IFRS 16 – *Leases* on January 1, 2019 requiring the Company's office, equipment and vehicle leases to be capitalized and reported on the Statement of Financial Position.

Non-current liabilities increased \$127,473 at December 31, 2018 compared to December 31, 2017 due to a new long-term finance lease for a CNC Lathe machining unit entered into on October 20, 2018, which expires on October 20, 2023.

RELATED PARTY TRANSACTIONS

Compensation awarded to the officers and directors of the Company for the years ended December 31, 2019 and 2018 include the following:

	2019	2018
Salaries, bonuses and short-term employee benefits	\$ 539,298	\$ 546,583
Stock-based compensation	241,330	306,789
	\$ 780,628	\$ 853,372

On September 30, 2019, \$494,000 of secured convertible debentures (the “Debentures”) were issued to six officers and directors of the Company in exchange for cash and the Company paid \$28,644 of interest related to Debentures to officer and directors on December 31, 2019.

FOURTH QUARTER RESULTS **(selected financial information)**

The following is a summary of the Company’s results for the three months ended December 31, 2019 with comparative amounts for the three months ended September 30, 2019 and December 31, 2018.

	Three Months Ended		
	December 31, 2019	September 30, 2019	December 31, 2018
Revenue	\$ 351,735	\$ 305,378	\$ 45,373
Cost of sales	210,879	193,959	55,871
Gross margin	140,856	111,419	(10,498)
Other income	7,798	4,656	10,261
Expenses			
Goodwill and intangible asset impairment	6,089,824	–	–
General and administration	468,997	1,629,010	601,353
Inventory impairment	112,298	44,576	74,574
Stock-based compensation	97,669	64,603	74,992
Research expenses	42,040	49,746	37,012
Depreciation and amortization	70,703	59,839	31,449
Finance costs	65,754	8,637	2,071
	6,947,285	1,856,411	821,451
Net loss	\$ (6,798,631)	\$ (1,740,336)	\$ (821,688)

The increase in the net loss of \$5,058,295 or 291% for the fourth quarter of 2019 compared to the third quarter of 2019 is mainly the result of:

- a goodwill and intangible asset impairment loss of \$6,089,824 recognized on December 31, 2019; offset by a
- a \$1,160,012 decrease in general and administrative expenses fees due to the acquisition of 1955554 Alberta Ltd., an arms-length private consulting company for total consideration of \$1,400,000 which was satisfied through the issuance of secured convertible debentures and resulted in a one-time \$1.1 million consulting fee being recognized on September 30, 2019.

The increase in the net loss of \$5,976,943 or 727% for the fourth quarter of 2019 compared to the fourth quarter of 2018 is mainly the result of:

- a goodwill and intangible asset impairment loss of \$6,089,824 recognized on December 31, 2019; offset by a
- a \$151,354 increase in gross margin during the fourth quarter of 2019 compared to the fourth quarter of 2018 due to an increase in sales of HARP™ pumps.

SUMMARY OF QUARTERLY RESULTS
(selected financial information)

2019	Q4	Q3	Q2	Q1
Total Revenue	\$ 359,533	\$ 310,034	\$ 231,961	\$ 220,550
Net loss	(6,798,631)	(1,740,336)	(557,072)	(533,116)
Per share	(0.06)	(0.02)	(0.00)	(0.01)

2018	Q4	Q3	Q2	Q1
Total Revenue	\$ 55,634	\$ 91,787	\$ 68,080	\$ 146,239
Net loss	(821,688)	(663,675)	(553,831)	(508,572)
Per share	(0.01)	(0.01)	(0.01)	(0.01)

See Fourth Quarter Results above regarding the net loss increase of \$5,058,295 or 291% in the fourth quarter of 2019 compared to the third quarter of 2019.

The net loss increase of \$1,183,264 or 212% in the third quarter of 2019 compared to the second quarter of 2018 is mainly the result of the acquisition of 1955554 Alberta Ltd., an arms-length private consulting company, on September 30, 2019 for total consideration of \$1,400,000 which was satisfied through the issuance of secured convertible debentures and resulted in a one-time \$1.1 million consulting fee being recognized.

The net loss increase of \$23,956 or 4% in the second quarter of 2019 compared to the first quarter of 2019 is mainly the result of a \$22,006 increase in general and administration expense primarily in the HARP™ commercialization expenses.

The net loss decrease of \$288,572 or 35% in the first quarter of 2019 compared to the fourth quarter of 2018 is mainly the result of a \$139,550 decrease in general and administration expense due to the adoption of IFRS 16 resulting in previously reported general and administration operating lease payments now being capitalized and included on the Statement of Financial Position as well as expense reductions in meals and travel expenses, bad debt expenses, audit expenses, legal expenses and public company costs; a \$80,192 increase in gross margin due to increased sales and a \$74,574 decrease in inventory impairment.

The net loss increase of \$158,013 or 24% in the fourth quarter of 2018 compared to the third quarter of 2018 is mainly the result of a \$74,574 inventory impairment recognized in the fourth quarter of 2018 related to first generation HARP™ inventory that is no longer usable and a \$36,151 decrease in gross margin.

The net loss increase of \$109,844 or 20% in the third quarter of 2018 compared to the second quarter of 2018 is mainly the result of a \$132,325 increase in general and administration expenses due to the increase in employees and other expenses related to commercialization of the HARP™ and an increase in legal fees related to patents, partially offset by a \$12,327 decrease in stock option expense.

The net loss increase of \$45,259 or 9% in the second quarter of 2018 compared to the first quarter of 2018 is mainly the result of a \$32,403 increase in general and administration expenses, a \$12,178 increase in stock option expense and a \$13,862 decrease in gross margin, offset by a \$6,905 decrease in facilities expense and a \$5,741 increase in interest income.

CONTRACTUAL OBLIGATIONS

The Company has the following contractual obligations, including the two-year office lease extension using the current monthly lease rate, as of the date of this report:

	2020	2021	2022	2023	2024
Office lease	\$ 91,200	\$ 136,800	\$ 91,200	\$ –	\$ –
Machines & equipment leases	28,551	42,827	41,493	33,467	–
Vehicle leases	9,833	–	–	–	–
Total	\$ 129,584	\$ 179,627	\$ 132,693	\$ 33,467	\$ –

Office Lease:

The office lease commitment is for the Calgary prototype manufacturing facility and office space located at 2620, 58th Avenue S.E. Monthly rent excluding operating costs and GST is \$11,400 per month until August 31, 2020 and includes an option to extend for an additional two years after this date.

Machine and Equipment Leases:

The Company committed to a ninety-month finance lease for a CNC Lathe machine which expires October 20, 2023 and a ninety-month lease of a photocopier which expires June 30, 2022.

Vehicle Leases:

The Company has committed to two vehicle leases each with twenty-four month terms which expire on June 30, 2020 and October 15, 2020.

LIQUIDITY AND CAPITAL RESOURCES

As at December 31, 2019, the Company had positive working capital of \$0.7 million. The Company's policy is to invest its cash only in an interest-bearing commercial investment account with a major international bank.

On September 30, 2019, the Company completed a \$900,000 private placement of secured convertible debentures concurrently with the closing of the acquisition of 1955554 Alberta Ltd., an arms-length private consulting company, which held \$300,000 in cash, for consideration of \$1,400,000 in convertible debentures.

The Company currently believes this cash injection and projected revenues will be sufficient to complete its strategic objectives through 2020 based on its current sales forecasts. However, the global impact of COVID-19 as well as the recent decline in oil prices in Canada and the United States have resulted in significant uncertainty as to the health of the global economy and specifically the oil and gas industry. The potential impact that these events will have on the Company's future sales and financial results cannot be reasonably estimated at this time.

The Company's ability to accomplish its plans throughout 2020 and beyond is dependent upon the Company meeting its projected sales forecast for the remainder of the year and if this does not occur, obtaining additional financing to continue operations; however, there is no assurance that the Company will achieve these objectives.

Refer to the going concern discussion in note 2 of the Company's annual financial statements for the year ended December 31, 2019.

The Company's credit facility with a Canadian bank was cancelled on September 30, 2019 in conjunction with the acquisition of 1955554 Alberta Ltd. It consisted of a maximum \$500,000 demand revolving loan bearing interest at the lender's prime rate plus 2% per annum available by account overdraft when the Company's EBITDA to total debt service exceeded 1.25:1.00. The Company was not able to draw on the facility during its existence due to its negative EBITDA. EBITDA is defined as the previous nine months earnings before interest, taxes and depreciation/amortization, adjusted for any non-cash charges, provisions or extraordinary items. Total debt service is defined as the sum of all interest and principal paid by the borrower on any third-party indebtedness, if not postponed to the bank after the previous nine months, and interest payments on the demand revolving loan assuming full advance over the previous nine months.

OUTSTANDING SHARE DATA

The Company's outstanding shares, options and warrants of the date of this report consist of:

	Number
Common shares:	
Balance, December 31, 2019	113,582,673
Common shares, as of April 28, 2020	113,582,673
Stock options:	
Balance, December 31, 2019	8,985,000
Options forfeited	(205,000)
Stock options outstanding, as of April 28, 2020	8,780,000
Stock options exercisable, as of April 28, 2020	4,876,667

FINANCIAL INSTRUMENTS

The Company's financial instruments are represented by cash, trade receivables, deposits, trade payables and long-term convertible debt.

The Company is exposed to financial risks arising from normal course business operations and its financial assets and liabilities. The financial risks include liquidity risk, interest rate risk, credit risk and foreign currency exchange risk.

Liquidity risk

Liquidity risk is the risk that the Company will encounter difficulties in meeting its financial liability obligations. The Company manages its liquidity risk by investing excess cash in a fully liquid investment bank account. This allows the Company to have access to additional funds in a very short time frame. All financial liabilities are due within one year with the exception of the Company's long-term debt which matures on September 30, 2022.

As disclosed in note 10 of the Company's annual audited financial statements for the year ended December 31, 2019, the Company closed a Debenture private placement for gross proceeds of \$900,000 as well as acquired the assets of 1955554 Alberta Ltd which included \$300,000 in cash for consideration of \$1.4 million of Debentures, both of which closed on September 30, 2019. The Company currently believes this cash injection and projected revenues will be sufficient to complete its strategic objectives through 2020 based on its current sales forecasts. However, the global impact of COVID-19 as well as the recent decline in oil prices in Canada and the United States have resulted in significant uncertainty as to the health of the global economy and specifically the oil and gas industry. The potential impact that these events will have on the Company's future sales and financial results cannot be reasonably estimated at this time.

The Company's ability to accomplish its plans throughout 2020 and beyond is dependent upon the Company meeting its projected sales forecast for the remainder of the year and if this does not occur, obtaining additional financing to continue operations; however, there is no assurance that the Company will achieve these objectives. Refer to the going concern discussion in note 2 of the Company's annual audited financial statements for the year ended December 31, 2019.

Interest rate risk

Interest rate risk is the risk that the value of a financial instrument will fluctuate as a result of changes in market interest rates. The Company is exposed to interest rate risk if the cash flows generated from its cash fluctuate in response to changes in market interest rates.

At December 31, 2019, cash was comprised of \$1,034,069, of which \$863,418 was held on deposit in a HSBC commercial investment account which earns a fixed interest of 1.75% per annum for balances held over \$1,000,000, thus the Company has no exposure to fluctuating market interest rates.

At December 31, 2019, the Company's outstanding convertible debt contained a fixed rate of interest at 6% per annum. The Company has no floating interest rate debt and is not exposed to interest rate risk at this time.

Credit risk

The Company is exposed to credit risk where a financial loss would be experienced if a counterparty to a financial asset failed to meet its obligations. The Company's maximum credit risk exposure is limited to the carrying values of its cash, trade receivables and deposits as disclosed in the Company's annual audited financial statements for the year ended December 31, 2019.

The Company mitigates its exposure to credit risk with respect to cash by maintaining its bank accounts and cash investments with a major international bank, thus the Company's management believes the credit risk associated with cash is low.

The Company manages its credit risk with respect to trade receivables and deposits by performing credit evaluations of its customers and only grants credit based on a review of historical collection experience, current aging status, financial condition of the customer and anticipated industry conditions. The trade receivables balance at December 31, 2019 consists of amounts owing from eight customers and the federal government for GST refunds. The majority of the balance owing has been collected subsequent to year-end. The Company has fully provided for two customer invoices in the amount of \$50,242 in its Allowance for Doubtful Accounts provision. The Company's historical expected credit loss is insignificant.

Foreign Currency Exchange Risk

Events in the global financial markets have been coupled with increased volatility in the currency markets. A substantial portion of the Company's incoming revenue is currently earned in U.S. dollars, but a substantial portion of its operating expenses is currently incurred in Canadian dollars. Fluctuations in the exchange rate between the U.S. dollar and other currencies, such as the Canadian dollar, may have a material adverse effect on the Company's business, financial condition and operating results. The Company's only exposure to U.S. denominated financial instruments at December 31, 2019 was a receivable of USD\$41,664.

OPERATIONAL AND BUSINESS RISKS

Similar to other development stage enterprises, the Company faces several key risks in its business including the following:

Early Stage of Development and Limited Product Line

The Company has generated limited revenues from the commercialization of its products. Most of the Company's products have not been fully developed or tested, and there can be no assurance that any such products, if and when fully developed and tested, will perform in accordance with the Company's expectations, that necessary regulatory approvals, or clearances, will be obtained in a timely manner, if at all, or that any of the Company's products can be successfully and profitably developed, produced and marketed.

Market Acceptance of New Technology

The markets for the Company's products, technologies and services, and in particular its patented proprietary HART System, are characterized by rapidly changing technology, evolving industry standards and frequent product innovations. The Company's products and services embody complex technology and are designed to be compatible with current and evolving industry standards. Significant resources are invested in the development of products for the markets served by the Company. As with any new technology, there is substantial risk that the marketplace may not accept the Company's products and services. The Company's success depends upon market acceptance of existing products, technologies and services and the Company's ability to enhance those products, technologies and services. Market acceptance of the Company's offerings depends, in large part, upon its ability to demonstrate its performance and cost-effectiveness over competing alternatives and upon the success of its sales efforts as well as those of its customers. The Company may not be able to market its products and services successfully and no assurance can be given that any of its current or future products or services will be accepted in the marketplace.

Competition

The industry in which the Company operates is highly competitive. The Company's focus on utilizing its patented products to enhance and increase ultimate production in both conventional and unconventional horizontal oil and natural gas wells differentiates it from its competitors. However, there is no assurance that competitors will not provide services and products similar or superior to the Company's. Many of the current and potential competitors are also organizations with a more established reputation and with access to greater financial, technological, personnel and other resources than the Company. Because of their greater resources, some of the Company's competitors may be able to adapt more quickly to new or emerging technologies, government changes and customer requirements, or devote greater resources to the promotion and sales of their products than the Company can, when the market evolves sufficiently where the customer uptake and demands warrant their attention and vast resources. Any improvement in the Company's competitors' ability to provide their products and services more effectively or to develop successful technologies could adversely affect the Company's business, financial conditions and results of operations.

Penetration of Markets and Continued Growth

Should the Company fail to penetrate core markets and existing geographic markets or to successfully expand its business into new markets, the growth in sales of the products, technologies and services, along with the Company's operating results, could be materially and adversely affected. The ability to further penetrate core markets and existing geographic markets in which the Company competes is subject to numerous factors, many of which are beyond the Company's control. The Company cannot assure that the efforts to increase market penetration will be successful. The failure to do so could adversely affect the Company's business, financial condition and results of operations.

Protection of Intellectual Property

The success and ability of the Company to compete depends on the proprietary technology of the Company, proprietary technology of third parties that has been, or is required to be, licensed by the Company and the ability of the Company and such third parties to prevent others from copying such proprietary technologies. The Company currently relies on intellectual property rights and other contractual or proprietary rights, including (without limitation) copyright, trademark laws, trade secrets, confidentiality procedures, contractual provisions, licenses and patents, to protect its proprietary technology. The Company also relies on third parties from whom licenses have been received to protect their proprietary technology. The Company may have to engage in litigation in order to protect its patents or other intellectual property rights, or to determine the validity or scope of the proprietary rights of others. This kind of litigation can be time-consuming and expensive, regardless of whether or not the Company is successful. The process of seeking patent protection can itself be long and expensive, and there can be no assurance that any patent applications of the Company or such third parties will actually result in issued patents, or that, even if patents are issued, they will be of sufficient scope or strength to provide meaningful protection or any commercial advantage to the Company. Furthermore, others may develop technologies that are similar or superior to the technology of the Company or such third parties or design around the patents owned by the Company and/or such third parties.

Despite the efforts of the Company or such third parties, the intellectual property rights, particularly existing or future patents, of the Company or such third parties may be invalidated, circumvented, challenged, infringed or required to be licensed to others. It cannot be assured that any steps the Company or such third parties may take to protect its intellectual property rights and other rights to such proprietary technologies that are central to the Company's operations will prevent misappropriation or infringement or the termination of licenses from third parties.

Reliance on Key Personnel

The Company's ability to successfully implement its strategy and to operate profitably is dependent on the abilities, experience and efforts of members of senior management and key production, sales and marketing, engineering and research and development personnel. The Company could be adversely impacted if any of its key employees become unable or unwilling to continue their employment with the Company. The Company is dependent upon a small group of key individuals who have the technical knowledge required for the successful development of its technologies and the execution of its strategic plan.

The loss of key employees to a competitor and an inability to attract and retain experienced key employees could disrupt the Company's operations, delay the development and commercialization of Company's products and adversely affect Company's business, financial condition and results of operations.

Dependence on Outside Agents and Distributors

The Company's success will also depend, to a significant extent, upon the ability to develop strategic alliances with distributors. Furthermore, the initial market penetration for the Company's products and services will heavily depend on the level of success of sales efforts. There can be no assurance that such alliances will develop or that they will prove successful over the course of the Company's future operations.

Additional Financing Requirements and Access to Capital

The Company may require additional capital to pursue further research and development, sales and marketing efforts for the Company's products, and for working capital in support of its growth objectives. From time to time, the Company may raise additional funds through public or private financing or obtain

financing from other sources. Additional funding may not be available on terms which are acceptable to the Company, or at all. If adequate funding is not available on reasonable terms, the Company may need to delay, reduce or eliminate research and development, sales and marketing efforts or obtain funds on terms less favorable than would otherwise be acceptable. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of those securities will result in dilution to the shareholders. Moreover, the incurrence of debt financing could result in a substantial portion of the operating cash flow being dedicated to the payment of principal and interest on this indebtedness and could impose restrictions on the operations. This could render the Company more vulnerable to competitive pressures and economic downturns. Any debt financing entered into by the Company may involve covenants that restrict the operations. These restrictive covenants, which may include limitations on borrowing, specific restrictions on the use of the assets as well as prohibitions on the ability to create liens, pay dividends, redeem capital stock or make investments, could adversely affect the Company's business, financial condition and results of operations. In the event the Company enters into such debt covenants, the Company's ability to make scheduled payments of principal and interest on, or to refinance, its indebtedness will depend on its future operating performance cash flow, which will be subject to prevailing economic conditions, prevailing interest rate levels, and financial, competitive, business and other factors, many of which will be beyond its control.

Negative Operating Cash Flow

The Company has made significant investments in research and development and general and administrative expenses in order to develop its proprietary technologies and expand its business. The Company reported negative cash flow from operating activities of \$1,779,407 for the financial year ended December 31, 2019. Because the Company continues to incur significant expenditures in general and administrative expenses and development expenses, the Company anticipates that it will continue to have negative cash flow until it reaches a sufficient level of sales with positive gross margins to cover operating expenses. As such, there is no assurance that the Company will not report negative operating cash flow in future periods.

Economic Environment and Volatility of the Oil and Natural Gas Industry

The Company's activities depend on general economic factors and conditions in the oil and natural gas industry, many of which are out of the Company's control. The global economic environment triggers demand for oil and natural gas, thus affecting the price of these commodities and, in turn, industry's willingness to invest in exploration and development capital expenditure, including for the types of equipment provided by the Company. Market events and conditions, including disruptions in international credit markets and other financial systems, the deterioration of global economic conditions, and expectations about future oil and natural gas prices, can, and have, caused significant volatility to commodity prices. Any substantial reduction in demand for oil and natural gas accompanied by lower prices and reductions in capital expenditure programs, could adversely affect the Company's business, financial condition and results of operations.

Geopolitical and Global Events

Various events, including natural disasters, extreme weather conditions, labour disputes, civil unrest, war, political instability, terrorism, and contagious illness outbreaks, or the perceived threat of these events, may cause a disruption of the Company's operations. In addition, the current United States administration has called for changes to domestic and foreign policy. The Company cannot predict the impact, if any, of the policies adopted by the current United States administration will have on the Company's business.

Changes in Legislation

It is possible that the Canadian federal and provincial government or regulatory authorities could choose to change the Canadian environmental and intellectual property laws or other laws applicable to the Company and that any such changes could materially adversely affect the Company, its shareholders and the market value of the Common Shares.

Legal Proceedings

The alleged failure by the Company to comply with applicable laws and regulations may lead to the imposition of fines, penalties, or the denial, revocation or delay of any applicable permits or licenses by governmental authorities. In addition, the Company may be subject of litigation by customers, suppliers and other third parties. A significant judgment against the Company, the loss of a significant permit or other approval or the imposition of a significant fine or penalty could adversely affect the Company's business, financial condition and results of operations. Litigation is expensive and time consuming and may divert management's attention away from the operations of the business.

Product Liability

The Company's products may expose it to product liability claims. Although the Company maintains adequate product liability insurance, a product liability claim brought against the Company or a third-party that the Company is required to indemnify, whether with or without merit, could have a material adverse effect on the Company's business, financial condition, operating results and cash flows.

Share Price Volatility

The Company's share price has historically been subject to volatility. Accordingly, the price of the Company's common shares may decrease in the future due to a number of Company and industry-specific or general economic factors. The price of the Company's common shares may fluctuate substantially in the future due to, among other things: the failure of quarterly or annual operating results to meet expectations; the reaction of markets and securities analysts to announcements and developments involving the Company; adverse developments in the worldwide, Canadian, or United States economy, financial markets or the market that the Company serves; actions by key competitors; additions or departures of key staff; announcements of legal proceedings or regulatory matters; general volatility in the stock market. The Company's share price could also be adversely affected if a large number of its common shares are offered for sale or sold. If the supply of the Company's common shares is significantly greater than the associated demand, the market price of the Company's common shares may significantly decline. In addition, the stock market has experienced volatility that has affected the market prices of the equity securities of many companies and that has often been unrelated to the operating performance of such companies. A number of other factors, many of which are beyond the Company's control, could also cause the market price of the Company's common shares to fluctuate substantially.

Tax Matters

Although management is of the view that all expenses and tax credits claimed by the Company, including research and development expenses ("tax credits"), are reasonable, deductible and have been correctly determined, there can be no assurance that the Canadian taxation authorities will agree with this assessment. If the Canadian taxation authorities successfully challenge such expenses or the correctness of any income tax credits claimed, the Company's operating results could be adversely affected. If the Canadian taxation authorities reduce the tax credits, either by reducing the rate of the grant or the criteria for eligibility of some research and development expenses in the future, the Company's operating results could be adversely affected.