



Management's Discussion and Analysis
For the three and nine months ended September 30, 2017

PRESIDENT'S UPDATE

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

High Angle Lift Solution (“HALS”)

As previously discussed in our press release dated August 23, 2017, the HALS is a High Angle Lift Solution that can have certain downhole tools added, such as horizontal separation, sand control, recovery flow tubes and pack off assemblies for flow control. The added option of instrumentation allows the HALS to be utilized to evaluate the horizontal section while pumping and producing at optimal rates. The proprietary benefit that Raise provides to Exploration & Production companies (“E&P’s”) is optimized wellbore design that allows insight into flow conditions in the horizontal section of the wellbore.

In August 2017, the Company initiated “Open Houses” to introduce the HALS to potential customers. Two were held in the Company’s shop in Calgary, Alberta, which was attended by a total of 65 industry representatives and resulted in a number of private showings to individual companies and followed by sales in the Cardium, Frobisher and Glauconitic zones in central and southern Alberta and SE Saskatchewan.

United States

In October 2017, the Company entered into an exclusive distribution agreement with Endurance Lift Solutions, LLC (“Endurance”). This was followed by an Open House at their main location in Midland, Texas, which was attended by 80 local company representatives. As a result of this Open House, the Company has just completed its first sale in South Texas and has a number of additional sales booked in the upcoming weeks. Raise and Endurance are also launching marketing and open houses in other U.S. locations in December 2017. The Company is excited about this partnership and believes it has a progressive and first class relationship with Endurance going forward into the future. For more information on Endurance, please go to www.endurancelift.com.

Horizontal Artificial Recovery Technology (“HART”)

The Company has received five patents covering the United States, Australia, Russia, China and Canada for the system and method claims of its HART system. Five additional industrialized country patents are pending. These are important patent claims as they cover the area of any pump type run in multiples in a horizontal wellbore.

The Company has received a number of enquiries from international companies that are interested in purchasing its HALS. With installations of HALS, which provides additional wellbore information to E&P’s, the Company expects HART sales to follow.



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 unaudited condensed interim financial statements of Raise Production Inc. ("Raise Production" or the "Company") as at and for the three and nine months ended September 30, 2017 as well as the audited financial statements and MD&A for the year ended December 31, 2016.

Information in this MD&A and the financial statements has been presented in Canadian dollars. The unaudited condensed interim financial statements for the three and nine months ended September 30, 2017 have been prepared in accordance with IAS 34 – Interim Financial Reporting.

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 November 22, 2017. 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 oil and gas wells.

The Company is considered to be a development stage enterprise, as it has yet to generate significant revenue from its planned principal businesses, 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, and its High Angle Lift Solution ("HALS"). 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

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, 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: the ability of Raise Production to obtain required capital to finance its product development, commercialization of products and operations, 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, 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 – Risks associated with financial assets and liabilities*". 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

| | Three months ended Sept 30 | | Nine months ended Sept 30 | |
|---|----------------------------|--------------|---------------------------|---------------|
| | 2017 | 2016 | 2017 | 2016 |
| Revenue | \$ 25,946 | \$ 56,855 | \$ 118,466 | \$ 217,835 |
| Cost of sales | 11,850 | 53,734 | 101,033 | 166,597 |
| Gross margin | 14,096 | 3,151 | 17,433 | 51,238 |
| Other income | 3,529 | 2,998 | 20,522 | 13,523 |
| Expenses: | | | | |
| General and administration | 420,520 | 287,316 | 1,158,762 | 1,032,044 |
| Depreciation and amortization | 22,625 | 34,757 | 77,024 | 104,222 |
| Stock-based compensation | 37,320 | 26,110 | 61,292 | 76,362 |
| Research expenses | 46,496 | 52,041 | 46,496 | 80,852 |
| Finance costs | 1,586 | 3,573 | 6,586 | 12,687 |
| Asset impairment | – | – | – | 5,867 |
| | 528,547 | 403,797 | 1,350,160 | 1,312,034 |
| Net loss and comprehensive loss | \$ (510,922) | \$ (397,648) | \$(1,312,205) | \$(1,247,273) |
| Net loss per share – basic and diluted | \$ (0.01) | \$ (0.00) | \$ (0.01) | \$ (0.01) |

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 High Angle Lift Solution ("HALS") segment provides an artificial lift solution for the build and vertical section of a horizontal wellbore. HALS addresses the production challenges and downtime associated with the currently available artificial lift technology, particularly in high gas to oil ratio wells. HALS can have certain downhole tools added, 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 high angle pump 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. All costs incurred for this segment have been capitalized as HART development costs beginning April 1, 2013.

The Engineering Project Consulting segment provides engineering services to external customers for the design and development of new artificial lift products, such as a large bore pump the Company was developing during the three and nine months ended September 30, 2016 until the project was put on hold by the customer.

The Hydraulic Submersible Pump ("HSP") inventory segment consists of sales of the Company's legacy inventory at cost to an external customer. Additional sales of this legacy inventory are not anticipated at this point in time.

The Corporate and Other segment includes costs related to administrative activities that support all segments.

Revenue

| | Three months ended Sept 30 | | Nine months ended Sept 30 | |
|--|----------------------------|-----------|---------------------------|------------|
| | 2017 | 2016 | 2017 | 2016 |
| HALS revenue | \$ 25,700 | \$ 53,185 | \$ 45,400 | \$ 53,185 |
| HSP inventory sales | – | – | 69,402 | – |
| Service and other revenue | 246 | 3,700 | 3,664 | 8,650 |
| Engineering project consulting revenue | – | – | – | 156,000 |
| Total | \$ 25,946 | \$ 56,885 | \$ 118,466 | \$ 217,835 |

The decrease in HALS revenue for the three months ended September 30, 2017 compared to the same period in the prior year is the result of the majority of the prior year figure consisting of the sale of one 2.5 inch prototype rod pump that was designed and manufactured for an industry partner. The current year revenue consists of sales of the Company's commercialized 1.5 inch high angle pump included as part of HALS.

The majority of revenue for the nine months ended September 30, 2017 consisted of the sales of the Company's high angle pump included as part of HALS and the recognition of prior year sales of HSP inventory that was previously reported as deferred revenue in the Company's statement of financial position until the inventory items were picked up by the customer in June 2017.

The majority of revenue for the nine months ended September 30, 2016 consisted of engineering project revenue earned from the completion of the third and fourth phases of a technology development agreement with an industry partner for the design and development of a large bore rod pump and the sale of one 2.5 inch prototype rod pump that was designed and manufactured for this industry partner.

Cost of Sales

| | Three months ended Sept 30 | | Nine months ended Sept 30 | |
|------------------------------|----------------------------|------------------|---------------------------|-------------------|
| | 2017 | 2016 | 2017 | 2016 |
| HALS cost of inventory | \$ 11,850 | \$ 50,958 | \$ 30,952 | \$ 64,918 |
| HSP cost of inventory | – | – | 69,402 | – |
| Other cost of inventory | – | 2,776 | 679 | 5,832 |
| Engineering project salaries | – | – | – | 95,847 |
| Total | \$ 11,850 | \$ 53,734 | \$ 101,033 | \$ 166,597 |

The cost of sales for the three months ended September 30, 2017 consisted of the costs of manufacturing components for the Company's 1.5 inch high angle pump. The cost of sales for the three months ended September 30, 2016 mainly consisted of the costs of manufacturing components for a 2.5 inch prototype rod pump for an industry partner.

The cost of sales for the nine months ended September 30, 2017 mainly consisted of the original cost of the HSP inventory picked up by the customer in June 2017 and the costs of manufacturing components for the Company's 1.5 inch high angle pump.

The cost of sales for the nine months ended September 30, 2016 mainly consisted of salaries and benefits related to the recognition of engineering staff costs for the completion of the third and fourth phases of the technology development project discussed above, the cost of inventories for developing the test facility related to this agreement and the costs of manufacturing components for a 2.5 inch prototype rod pump for an industry partner.

Gross Margin

| | Three months ended Sept 30 | | Nine months ended Sept 30 | |
|--------------|----------------------------|----------|---------------------------|-----------|
| | 2017 | 2016 | 2017 | 2016 |
| Gross margin | \$ 14,096 | \$ 3,151 | \$ 17,433 | \$ 51,238 |

The increase in the gross margin percentage of total revenue of 54% during the three months ended September 30, 2017 compared to 6% for the same period in the prior year is mainly the result of the higher cost of manufacturing a prototype 2.5 inch high angle pump in the prior year compared to commercialized 1.5 inch high angle pumps in the current year.

The decrease in the gross margin percentage of total revenue of 15% for the nine months ended September 30, 2017 compared to 23% for the same period in the prior year is mainly the result of no margin being earned on the sales of the Company's HSP inventory in 2017 and the 2016 figures consisting mainly of project revenue earned at higher margins.

Other Income

| | Three months ended Sept 30 | | Nine months ended Sept 30 | |
|---------------------------|----------------------------|-----------------|---------------------------|------------------|
| | 2017 | 2016 | 2017 | 2016 |
| Legal settlement proceeds | \$ - | \$ - | \$ 10,000 | \$ - |
| Interest income | 3,529 | 2,998 | 10,522 | 13,523 |
| Total | \$ 3,529 | \$ 2,998 | \$ 20,522 | \$ 13,523 |

The interest income earned during the three months ended September 30, 2017 is consistent with the same period in the prior year.

The 22% decrease in interest income for the nine months ended September 30, 2017, compared to the same period in 2016, is the result of the Company's investment account not paying interest on cash balances held in the account of less than \$1 million. The Company's investment account balance was less than \$1 million in January 2017 until the financing was completed in February 2017.

The Company held \$1.25 million in its cash investment account both at September 30, 2017 and September 30, 2016.

The Company received \$10,000 in the second quarter of 2017 as settlement for a legal claim it filed against a vendor for faulty equipment.

General and Administration

| | Three months ended Sept 30 | | Nine months ended Sept 30 | |
|--|----------------------------|-------------------|---------------------------|--------------------|
| | 2017 | 2016 | 2017 | 2016 |
| Salaries and benefits | \$ 262,209 | \$ 153,134 | \$ 657,247 | \$ 572,134 |
| Facilities | 51,217 | 51,438 | 162,850 | 157,217 |
| Sub-contracted and consulting services | 21,951 | 14,275 | 96,826 | 52,028 |
| Audit and accounting | 18,992 | 18,679 | 58,732 | 62,315 |
| Travel and meal expenses | 3,755 | 2,092 | 31,810 | 5,487 |
| Legal | 14,756 | 13,330 | 35,246 | 82,261 |
| Insurance | 10,081 | 9,033 | 27,334 | 26,945 |
| Public company expenses | 3,437 | 3,877 | 14,435 | 13,237 |
| Other | 34,122 | 21,458 | 74,282 | 60,420 |
| Total | \$ 420,520 | \$ 287,316 | \$1,158,762 | \$1,032,044 |

Overall general and administration expenses increased \$133,204 or 46% for the three month period ended September 30, 2017 compared to same period in 2016. Significant changes within the general and administration expenses consisted of:

- a \$109,075 increase in salaries and benefits due to the salaries for three new employees and three existing employees being allocated to commercialization of the HALS and expensed, rather than capitalized as HART development costs, offset by one less administrative employee employed during the nine months ended September 30, 2017 compared to the same period in the prior year; and
- a \$7,677 increase in sub-contracted and consulting services due to the engagement of an engineer consultant to assist with the Company's HALS commercialization.

Overall general and administration expenses increased \$126,718 or 12% for the nine month period ended September 30, 2017 compared to same period in 2016. Significant changes within the general and administration expenses consisted of:

- a \$85,113 increase in salaries and benefits due to three new employees and three existing employees being allocated to commercialization of the HALS and expensed, rather than capitalized as HART development costs offset by three less administrative employees employed during the nine months ended September 30, 2017 compared to the same period in the prior year;
- a \$44,798 increase in sub-contracted and consulting services due to the engagement of an advisor located in the southern United States to assist the Company with U.S opportunities, a graphic designer to update the Company's marketing materials and an engineer consultant to assist with commercialization of the Company's HALS; and
- a \$26,323 increase in travel and meals expenses due to the Company raising funds for its February 2017 private placement and new business development initiatives in eastern Canada and southern United States during the nine months ended September 30, 2017; offset by
- a \$47,015 decrease in legal expenses mainly due to a reduction in patent application legal fees for the nine months ended September 30, 2017 compared to the same period in the prior year as well as the majority of patent legal fees incurred during the nine months ended September 30, 2017 being capitalized as HART development costs.

Depreciation and Amortization

| | Three months ended Sept 30 | | Nine months ended Sept 30 | |
|-----------------------------------|----------------------------|------------------|---------------------------|-------------------|
| | 2017 | 2016 | 2017 | 2016 |
| Depreciation of fixed assets | \$ 22,625 | \$ 24,238 | \$ 69,524 | \$ 72,665 |
| Amortization of intangible assets | – | 10,519 | 7,500 | 31,557 |
| Total | \$ 22,625 | \$ 34,757 | \$ 77,024 | \$ 104,222 |

The reduction in depreciation and amortization for the three and nine months ended September 30, 2017 compared to the same periods in the prior year is mainly the result of the full amortization of the Company's patents and rights occurring in late 2016.

The Company has not yet recorded any amortization of the HART as it is not yet ready for use in the manner intended by management as of the date of this report.

Stock-based Compensation

| | Three months ended Sept 30 | | Nine months ended Sept 30 | |
|--------------------------|----------------------------|-----------|---------------------------|-----------|
| | 2017 | 2016 | 2017 | 2016 |
| Stock-based compensation | \$ 37,320 | \$ 26,110 | \$ 61,292 | \$ 76,362 |

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 time the options vest. 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.

During the three months ended September 30, 2017, no stock-based compensation was included in the carrying value of the HART (2016 - \$21,082). During the nine months ended September 30, 2017, \$43,078 of stock-based compensation was deducted from the carrying value of the HART due to a reversal of stock option expense required for individuals that are no longer employed by the Company (2016 - \$72,614 was included in the carrying value of the HART).

The changes in the amount of stock-based compensation expense for the three and nine months ended September 30, 2017 compared to the same periods in 2016 is mainly due to the timing of the stock option grants and the vesting period associated with each option grant.

The Company granted 1,170,000 stock options during the nine months ended September 30, 2017 and did not grant any stock options during the nine months ended September 30, 2016.

The Company has 5,083,333 options exercisable at September 30, 2017 compared to 7,239,167 at September 30, 2016.

Research Expenses

| | Three months ended Sept 30 | | Nine months ended Sept 30 | |
|-------------------|----------------------------|-----------|---------------------------|-----------|
| | 2017 | 2016 | 2017 | 2016 |
| Research expenses | \$ 46,496 | \$ 52,041 | \$ 46,496 | \$ 80,852 |

Research expenses for the three and nine months ended September 30, 2017 consisted of expenditures incurred for the development of the Company's patent pending downhole tools that form part of the HALS.

Research expenses for the three and nine months ended September 30, 2016 consisted of additional expenditures incurred on the development of a large bore rod pump after the suspension of the funding portion of the technology development agreement discussed in the Revenue section of this report. The expenditures consisted of a product designer salary and materials purchased for in-house testing of components. No additional expenditures were made towards this project in 2017 as of the date of this report.

Finance Costs

| | Three months ended Sept 30 | | Nine months ended Sept 30 | |
|------------------------|----------------------------|----------|---------------------------|-----------|
| | 2017 | 2016 | 2017 | 2016 |
| Finance lease interest | \$ 1,173 | \$ 3,141 | \$ 4,986 | \$ 10,796 |
| Bank charges | 418 | 432 | 1,600 | 1,891 |
| Total | \$ 1,586 | \$ 3,573 | \$ 6,586 | \$ 12,687 |

The reduction in total finance costs for the three and nine months ended September 30, 2017 compared to the same periods in the prior year is mainly the result of the decreasing interest charges as monthly payments are made on the two capital leases the Company committed to in early 2013, one of which ended in March 2017 and the other will end in February 2018.

Asset Impairment

| | Three months ended Sept 30 | | Nine months ended Sept 30 | |
|----------------------|----------------------------|------|---------------------------|----------|
| | 2017 | 2016 | 2017 | 2016 |
| Equipment impairment | \$ - | \$ - | \$ - | \$ 5,867 |

During the three and nine months ended September 30, 2016, the Company recognized a \$5,867 impairment on shop equipment that was no longer in use and had a carrying value in excess of its recoverable amount. No equipment impairment occurred during the three and nine months ended September 30, 2017.

Deferred Income Taxes

The Company has not recognized any deferred income tax asset given the uncertainty of profitability with its future operations. At September 30, 2017, the Company has a non-capital loss carry forward balance and deductible scientific research and development expenditures totaling approximately \$16.7 million

Net Loss and Net Loss per Share

The net loss for the three and nine months ended September 30, 2017 was \$510,922 and \$1,312,205, respectively, compared to a net loss of \$397,648 and \$1,247,273 during the same periods in 2016.

The increase in the net loss of \$113,724 or 28% for the three month period ended September 30, 2017 compared to the same period in 2016 is mainly the result of a \$133,204 increase in general and administration expenses offset by a \$12,132 decrease in depreciation and amortization.

The increase in the net loss of \$64,932 or 5% for the nine month period ended September 30, 2017 compared to the same period in 2016 is mainly the result of a \$126,718 increase in general and administration expenses and a \$33,805 decrease in gross margin offset by a \$34,356 decrease in research expenses, a \$27,198 decrease in depreciation and amortization and a \$15,070 decrease in stock-based compensation.

The net loss per share of \$0.01 for the three months ended September 30, 2017 and \$0.01 for the nine months ended September 30, 2017 is consistent with the net loss per share for the same periods in 2016.

Cash Used in Operating Activities

Cash flows used in operating activities for the nine months ended September 30, 2017 of \$1,293,832 are 22% higher than cash flows used in operating activities for the nine months ended September 30, 2016 of \$1,054,102. This increase is primarily the result of a \$126,663 decrease in non-cash working capital between the periods due to the timing of receipts in trade receivables and timing of payments in trade payables and accrued liabilities, which offset the reduction in the net loss.

SUMMARY OF QUARTERLY RESULTS (selected financial information)

| | Q3 2017 | Q2 2017 | Q1 2017 | Q4 2016 |
|-----------|-----------|-----------|-----------|-----------|
| Revenue | \$ 29,475 | \$ 99,253 | \$ 10,259 | \$ 3,914 |
| Net loss | (510,922) | (469,466) | (331,817) | (447,973) |
| Per share | (0.01) | (0.00) | (0.00) | (0.01) |

| | Q3 2016 | Q2 2016 | Q1 2016 | Q4 2015 |
|-----------|-----------|------------|-----------|-----------|
| Revenue | \$ 59,883 | \$ 109,862 | \$ 61,614 | \$ 8,637 |
| Net loss | (397,648) | (443,050) | (406,575) | (484,240) |
| Per share | (0.00) | (0.00) | (0.00) | (0.00) |

The net loss increase of \$41,456 or 9% in the third quarter of 2017 compared to the second quarter of 2017 is mainly the result of a \$46,495 increase in research expenses related to the HALS development, a \$34,127 increase in HALS commercialization expenses and a \$36,296 increase in stock-based compensation offset by a \$56,928 decrease in general and administration expenses mainly due to a reduction in sub-contracted services and one less administrative employee in the third quarter of 2017.

The net loss increase of \$137,649 or 41% in the second quarter of 2017 compared to the first quarter of 2017 is mainly the result of an increase in general and administration expenses due to three new employees added during the second quarter of 2017 and two existing employees being allocated to commercialization of the HALS and expensed in the second quarter of 2017 compared to being capitalized as HART development costs in the first quarter of 2017.

The net loss decrease of \$116,156 or 26% in the first quarter of 2017 compared to the fourth quarter of 2016 is mainly the result of a \$84,852 decrease in loss on derecognition of assets due to a rework of the Company's prototype surface units used for field testing occurring in the fourth quarter of 2016, a \$13,703 decrease in research expenses, a \$12,120 decrease in general and administration mainly due to lower legal expenses offset by increased travel expenses and a \$9,347 decrease in depreciation and amortization due to the Company's patents and rights being fully amortized in 2017.

The increase in the net loss of \$50,325 or 13% in the fourth quarter of 2016 compared to the third quarter of 2016 is mainly the result of a \$84,852 increase in loss on derecognition of assets due to a rework of the Company's prototype surface units used for field testing occurring in the fourth quarter of 2016 offset by a \$38,338 decrease in research expenses incurred during the fourth quarter of 2016.

The net loss decrease of \$45,402 or 13% in the third quarter of 2016 compared to the second quarter of 2016 is mainly the result of a \$92,401 decrease in general and administration expenses due to fewer administrative staff in the third quarter and a decrease in patent application legal fees, offset by a \$27,757 decrease in gross profit and a \$23,228 increase in research expenses.

The net loss increase of \$36,475 or 9% in the second quarter of 2016 compared to the first quarter of 2016 is mainly the result of a \$28,812 increase in research expenses and a \$17,608 increase in general and administration expenses mainly due to an increase in patent application legal fees, offset by a \$13,729 increase in gross profit.

The net loss decrease of \$77,665 or 16% in the first quarter of 2016 compared to the fourth quarter of 2015 is mainly the result of a \$59,946 decrease in general and administration expenses mainly due to a \$34,930 decrease in administrative salaries and benefits due to two less administrative employees employed in the first quarter of 2016 compared to the previous quarter, a \$11,410 decrease in SR&ED application expenses and a \$5,880 in public company costs due to the Company's AGM costs occurring in the fourth quarter of 2015.

CONTRACTUAL OBLIGATIONS

The Company has the following contractual obligations as September 30, 2017:

| | 2017 | 2018 | 2019 | 2020 | 2021 |
|-------------------------|------------------|-------------------|------------------|------------------|-----------------|
| Premise lease | \$ 34,200 | \$ 136,800 | \$136,800 | \$ 91,200 | \$ – |
| Office equipment leases | 9,760 | 2,666 | 2,666 | 2,666 | 2,666 |
| Finance leases | 19,019 | 12,680 | – | – | – |
| Total | \$ 62,979 | \$ 152,146 | \$139,466 | \$ 93,866 | \$ 2,666 |

Operating Lease Commitments:

Premise Lease:

The premise 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.

Equipment Leases:

The Company has committed to two equipment operating leases for computer equipment which expires December 31, 2017 and a photocopier which expires June 30, 2022.

Finance Lease Commitments:

Equipment Leases:

The Company committed to a finance lease in early 2013 for a horizontal machining center which expires February 28, 2018.

OUTSTANDING SHARE DATA

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

| | Number |
|---|-------------------|
| Common shares: | |
| Balance, December 31, 2016 | 88,941,691 |
| Private placement issuance | 8,932,144 |
| Shares issued upon option exercise | 742,500 |
| Common shares, as of November 22, 2017 | 98,616,335 |
| Stock options: | |
| Balance, December 31, 2016 | 7,812,500 |
| Options granted | 1,170,000 |
| Options exercised | (742,500) |
| Options forfeited | (1,825,000) |
| Options expired | (1,773,750) |
| Stock options outstanding, as of November 22, 2017 | 4,641,250 |
| Stock options exercisable, as of November 22, 2017 | 3,422,917 |
| Share purchase warrants: | |
| Balance, December 31, 2016 | — |
| Warrants issued upon private placement issuance | 4,466,072 |
| Share purchase warrants outstanding and exercisable, as of November 22, 2017 | 4,466,072 |
| Agent warrants: | |
| Balance, December 31, 2016 | — |
| Agent warrants issued upon private placement issuance | 437,529 |
| Agent warrants outstanding and exercisable, as of August 23, 2017 | 437,529 |

LIQUIDITY AND CAPITAL RESOURCES

As at September 30, 2017, the Company had positive working capital of \$0.9 million. The Company's policy is to invest its cash only in an interest bearing commercial investment account with a major international bank.

In February 2017, the Company closed a non-brokered private placement offering ("Offering") of 8,932,144 units at a price of \$0.25 per unit for total gross proceeds of \$2,233,036 and net proceeds of \$2,070,732 after share issuance expenses in two tranches on February 10, 2017 and February 21, 2017.

Each unit consisted of one common share ("Common Share") of the Company and one half of one common share purchase warrant. Each whole warrant is exercisable for one Common Share of the Company for a period of eighteen months from the applicable closing date at an exercise price of \$0.40 per share, subject to accelerated expiry in certain circumstances at the discretion of the Company. In total, the Company issued 8,932,144 common shares and 4,466,072 share purchase warrants.

In addition, the Company issued 437,529 agent warrants as compensation to the finders involved in the Offering. Each warrant is exercisable for one Common Share of the Company for a period of eighteen months from the applicable closing date at an exercise price of \$0.25 per share, subject to accelerated expiry in certain circumstances at the discretion of the Company.

This cash injection and projected incidental revenues will fund the Company's capital and operating expenditures into April 2018 based on the current monthly operating expense burn rate, not taking into account future sales. The Company's ability to accomplish its future plans is dependent upon the creation of positive cash flow through the successful commercialization of its products and obtaining additional financing, if required, to complete the commercialization process; 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 condensed interim financial statements for the three and nine months ended September 30, 2017.

The Company's credit facility with a Canadian bank consists 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 exceeds 1.25:1.00. EBITDA is defined as the previous six 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 six months, and interest payments on the demand revolving loan assuming full advance over the previous six months.

The amount available under the facility at any point in time is subject to margin requirements being the aggregate of 75% of acceptable receivables plus the lesser of 50% of acceptable inventory and/or equipment and \$100,000 minus any priority claims.

The loan is collateralized by a first priority security interest in all present and future personal property of the Company and a floating charge over the Company's present and after acquired real property. The debt covenants applicable to the credit facility while any portion of the demand revolving loan remains outstanding consist of:

- a) The Company will not permit its current assets to current liabilities at any time to be less than 1.25:1.00;
- b) The Company will not permit its debt to tangible net worth to exceed 2.50:1.00; and
- c) The Company will not permit its EBITDA to total debt service to be less than 1.25:1.00, tested quarterly, whereby the EBITDA and total debt service will be calculated using the trailing six months based on the first quarter after the EBITDA condition has been met, trailing nine months on the second quarter after the EBITDA condition has been met and trailing twelve months on the third quarter after the EBITDA condition has been met.

Current liabilities are defined as current liabilities less 50% of bonus payable, current portion of long-term debt and obligations under capital leases. Debt is defined as total liabilities less postponed/subordinated loans and 50% of bonus payable. Tangible net worth is defined as shareholder's equity less intangible assets plus postponed/subordinated loans plus 50% of bonus payable.

As of the date of this report, no funds have been drawn on this facility and the Company is in compliance with all debt covenants.

RELATED PARTY TRANSACTIONS

During the nine months ended September 30, 2017, \$7,009 was paid to Visual Strategies & Associates Inc., a corporation owned by the spouse of the Chief Financial Officer of the Company for website development and marketing materials design services. Visual Strategies will continue to provide these services to the Company when requested by the Chief Executive Officer. The measurement basis used for this transaction was based on the actual invoice received and paid by the Company.

RECENT PRONOUNCEMENTS ISSUED

The Company may be impacted by future changes in IFRS standards as follows:

The IASB issued IFRS 9, *Financial Instruments* (“IFRS 9”), in July 2014, as a complete standard, including the requirements previously issued related to the classification and measurement of financial assets and liabilities, and additional amendments to introduce a new expected loss impairment model for financial assets including credit losses. This standard replaces IAS 39, *Financial Instruments: Recognition and Measurement* (“IAS 39”). Retrospective application of this standard with certain exemptions is effective for fiscal years beginning on or after January 1, 2018, with earlier application permitted. The Company is currently assessing the impact of this standard.

The IASB issued IFRS 15, *Revenue from Contracts with Customers* (“IFRS 15”), in May 2014. This IFRS replaces IAS 18, *Revenue*, IAS 1, *Construction Contracts*, and several revenue related interpretations. IFRS 15 establishes a single revenue recognition framework which requires an entity to recognize revenue to reflect the transfer of goods and services for the amount it expects to receive, when control is transferred to the purchaser. The new standard is effective for periods beginning on or after January 1, 2018, with earlier adoption permitted. The Company is evaluating the impact of adopting IFRS 15 on its financial statements.

The IASB issued IFRS 16, *Leases* (“IFRS 16”), in January 2016, which requires entities to recognize lease assets and lease obligations on the balance sheet. For lessees, IFRS 16 removes the classification of leases as either operating leases or finance leases, effectively treating all leases as finance leases. Certain short-term leases (less than 12 months) and leases of low-value assets are exempt from the requirements and may continue to be treated as operating leases. IFRS 16 is effective for fiscal years beginning on or after January 1, 2019, with earlier adoption permitted. The Company is evaluating the impact of adopting IFRS 16 on its financial statements.

FINANCIAL INSTRUMENTS

The Company’s financial instruments are represented by cash, trade receivables, deposits, trade payables and finance lease obligations.

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 and credit 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 completion of a non-brokered private placement subsequent to year-end, in February 2017, as disclosed in note 7 of the Company's condensed interim financial statements for the three and nine months ended September 30, 2017, the Company believes its current cash resources are sufficient to complete its strategic objectives into April 2018 based on the current monthly operating expense burn rate, not taking into account future sales. The Company's ability to accomplish its future plans is dependent upon the creation of positive cash flow through the successful commercialization of its products and obtaining additional financing, if required, to complete the commercialization process; 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 condensed interim financial statements for the three and nine months ended September 30, 2017.

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 September 30, 2017, cash was comprised of \$1,283,426, of which \$1,245,351 was held on deposit in a HSBC commercial investment account which earns a fixed interest of 0.80% per annum, thus the Company has no exposure to fluctuating market interest rates.

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 financial statements as at September 30, 2017.

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 majority of the trade receivables balance at September 30, 2017 consists of amounts owing from two customers and the federal government for GST refunds. The majority of the balance owing to the Company at September 30, 2017 was collected subsequent to quarter-end.

OPERATIONAL AND BUSINESS RISKS

Information with respect to operational and business risks faced by the Company is included in the Company's MD&A for the year ended December 31, 2016.