

SECURITIES & EXCHANGE COMMISSION EDGAR FILING

Surna Inc.

Form: 10-K

Date Filed: 2019-03-19

Corporate Issuer CIK: 1482541

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 10-K

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2018

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

FOR THE TRANSITION PERIOD FROM ____ TO ____

Commission File Number: 000-54286

SURNA INC.

(Exact name of registrant as specified in its charter)

Nevada

(State or other jurisdiction of
incorporation or organization)

27-3911608

(I.R.S. Employer
Identification No.)

1780 55th Street, Suite C, Boulder, Colorado

(Address of principal executive offices)

80301

(Zip code)

(303) 993-5271

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act: None

Securities registered pursuant to Section 12(g) of the Act:

Title of Each Class Registered

Common stock, par value \$0.00001 per share

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. **Yes** ☐ **No** ☒.

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. **Yes** ☐ **No** ☒.

Indicate by check mark whether the issuer (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the last 90 days. **Yes** ☒ **No** ☐.

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). **Yes** ☒ **No** ☐.

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "non-accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer	<input type="checkbox"/>	Accelerated Filer	<input type="checkbox"/>
Non-accelerated Filer	<input type="checkbox"/>	Smaller Reporting Company	<input checked="" type="checkbox"/>
		Emerging Growth Company	<input type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). **Yes** ☐ **No** ☒.

The aggregate market value of the voting and non-voting common stock held by non-affiliates of the registrant as of the last business day of the registrant's most recently completed second fiscal quarter was approximately \$27,700,000 based upon a closing price of \$0.17 reported for such date on the OTCMarkets.

Common shares held by each executive officer and director and by each person who owns 5% or more of the outstanding common shares have been excluded in that such persons may be deemed to be affiliates.

As of March 19, 2019, the number of outstanding shares of common stock of the registrant was 227,536,638.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement relating to the 2019 Annual Meeting of Stockholders, to be filed within 120 days after the close of the registrant's year end, are incorporated by reference into Part III of this Annual Report on Form 10-K.

Surna Inc.
Annual Report on Form 10-K
For Fiscal Year Ended December 31, 2018

Table of Contents

	Page
<u>Part I</u>	
Item 1. Business	4
Item 1A. Risk Factors	14
Item 1B. Unresolved Staff Comments	25
Item 2. Properties	25
Item 3. Legal Proceedings	25
Item 4. Mine Safety Disclosures	25
<u>Part II</u>	
Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	26
Item 6. Selected Financial Data	26
Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations	27
Item 7A. Quantitative and Qualitative Disclosures About Market Risk	36
Item 8. Financial Statements and Supplementary Data	36
Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	36
Item 9A. Controls and Procedures	36
Item 9B. Other Information	37
<u>Part III</u>	
Item 10. Directors, Executive Officers and Corporate Governance	38
Item 11. Executive Compensation	38
Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	38
Item 13. Certain Relationships and Related Transactions, and Director Independence	38
Item 14. Principal Accountant Fees and Services	38
<u>Part IV</u>	
Item 15. Exhibits and Financial Statement Schedules	39
Item 16. Form 10-K Summary	39
Signatures	41

In this Annual Report on Form 10-K, unless otherwise indicated, the “Company”, “we”, “us” or “our” refer to Surna Inc. and, where appropriate, its wholly-owned subsidiary.

CAUTIONARY STATEMENT

This Annual Report on Form 10-K, including “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in Item 7, contains forward-looking statements that involve substantial risks and uncertainties. These forward-looking statements are not historical facts, but are based on current management expectations that involve substantial risks, uncertainties, and other factors, some of which are beyond our control and difficult to predict and could cause actual results to differ materially from those expressed in, or implied by, these forward-looking statements. Forward-looking statements relate to future events or our future financial performance. We generally identify forward-looking statements by terminology such as “may,” “will,” “should,” “expects,” “plans,” “anticipates,” “could,” “intends,” “target,” “projects,” “contemplates,” “believes,” “estimates,” “predicts,” “potential” or “continue” or the negative of these terms or other similar words. All statements, other than statements of historical fact, are statements that could be deemed forward-looking statements including, but not limited to, any projections of revenue, gross profit, earnings or loss, tax provisions, cash flows or other financial items; any statements of the plans, strategies or objectives of management for future operations; any statements regarding current or future macroeconomic or industry-specific trends or events and the impact of those trends and events on us or our financial performance; any statements regarding pending investigations, legal claims or tax disputes; any statements of expectation or belief; and any statements of assumptions underlying any of the foregoing.

These forward-looking statements are subject to known and unknown risks, uncertainties, assumptions and other factors that could cause our actual results of operations, financial condition, liquidity, performance, prospects, opportunities, achievements or industry results, as well as those of the markets we serve or intend to serve, to differ materially from those expressed in, or suggested by, these forward-looking statements. These forward-looking statements are based on assumptions regarding our present and future business strategies and the environment in which we operate. Important factors that could cause those differences include, but are not limited to:

- our business prospects and the prospects of our existing and prospective customers;
- the inherent uncertainty of product development;
- regulatory, legislative and judicial developments, especially those related to changes in, and the enforcement of, cannabis laws;
- increasing competitive pressures in our industry;
- our relationships with our customers and suppliers;
- general economic conditions or conditions affecting demand for the products offered by us in the markets in which we operate, being less favorable than expected;
- changes in our business strategy or development plans, including our expected level of capital expenses and working capital;
- our ability to attract and retain qualified personnel;
- our ability to raise equity and debt capital to fund our operations and growth strategy, including possible acquisitions;
- future revenue being lower than expected; and
- our ability to convert our backlog into revenue in a timely manner, or at all; and
- our intention not to pay dividends.

Although we believe that the assumptions on which these forward-looking statements are based are reasonable, any of those assumptions could prove to be inaccurate, and as a result, the forward-looking statements based on those assumptions also could be inaccurate. In light of these and other uncertainties, the inclusion of a projection or forward-looking statement in this annual report on Form 10-K should not be regarded as a representation by us that our plans and objectives will be achieved. These risks and uncertainties include those described or identified in “Risk Factors” in this Annual Report on Form 10-K. You should not place undue reliance on these forward-looking statements, which apply only as of the date of this Annual Report on Form 10-K. Except as required by the federal securities laws, we undertake no obligation to revise or update any forward-looking statements, whether as a result of new information, future events or otherwise, to reflect events or circumstances occurring after the date of this Annual Report on Form 10-K. The forward-looking statements and projections contained in this Annual Report on Form 10-K are excluded from the safe harbor protection provided by Section 27A of the Securities Act.

PART I

Item 1. Business

Overview

We were incorporated in the State of Nevada on October 15, 2009. On July 25, 2014, we acquired 100% of the membership interests of Hydro Innovations, LLC, a Colorado limited liability company ("Hydro Innovations"), from Stephen and Brandy Keen (the "Keens"). Hydro Innovations was founded by the Keens in Austin, Texas in 2006 to provide agricultural and other growers with the means to maintain a properly controlled indoor cultivation environment with customized, purpose-built cooling equipment, rather than repurposing conventional equipment made for comfort cooling. In 2011, Hydro Innovations delivered its environmental control system to one of the first commercial, state-regulated cannabis cultivation facilities licensed to grow medical cannabis in Arizona.

As state laws regarding the use of cannabis have evolved, we have focused on designing, engineering and manufacturing application-specific environmental control and air sanitation systems for commercial, state- and provincial-regulated indoor cannabis cultivation facilities in the U.S. and Canada. Our engineering and technical team provides energy and water efficient solutions that allow growers to meet the unique demands of a cannabis cultivation environment through precise temperature, humidity, light, and process controls and to satisfy the evolving code and regulatory requirements being imposed at the state, provincial and local levels.

Our objective is to leverage our experience in this sector of the overall cannabis cultivation industry in order to bring value-added climate control solutions to our customers that help improve their overall crop quality and yield as well as optimize the resource efficiency of their controlled environment (i.e., indoor and sealed greenhouses) cultivation facilities. We have been involved in consulting, equipment sales and/or full-scale design for over 800 grow facilities since 2006, making us a trusted resource for indoor environmental design and control management for the cannabis industry.

Our customers include businesses from small cultivation operations to licensed commercial facilities ranging from several thousand to more than 100,000 square feet. We have sold our equipment and systems throughout the U.S. and Canada. Our revenue stream is derived primarily from supplying mechanical engineering services and climate and environmental control equipment to commercial indoor cannabis grow facilities. Although our customers do, we neither produce nor sell cannabis.

We are headquartered in Boulder, Colorado.

Shares of our common stock are traded on the OTCMarkets under the ticker symbol "SRNA."

Our New Business Model and Strategy

Introduction

Indoor cannabis cultivators are facing the multiple headwinds of high energy costs, increasingly rigorous quality standards and declining cannabis prices. To be competitive, among other things, our customers must develop innovative ways to meet the demands of their business and reduce energy costs, 90% of which is related to their HVAC and lighting systems. That is our focus. We deliver products and services for our customers' entire facility lifecycles, not just a "one-and-done" environmental control engineering/design and equipment package as part of a facility's initial construction. We have the advantage of early engagement with our customers at the pre-build and construction phases and the opportunity for building longer-term relationships with our existing customers and their facilities. Going forward, our plan is to capitalize on our existing customer relationships and attempt to become "stickier" to our customers, seeking to generate incremental and recurring revenue.

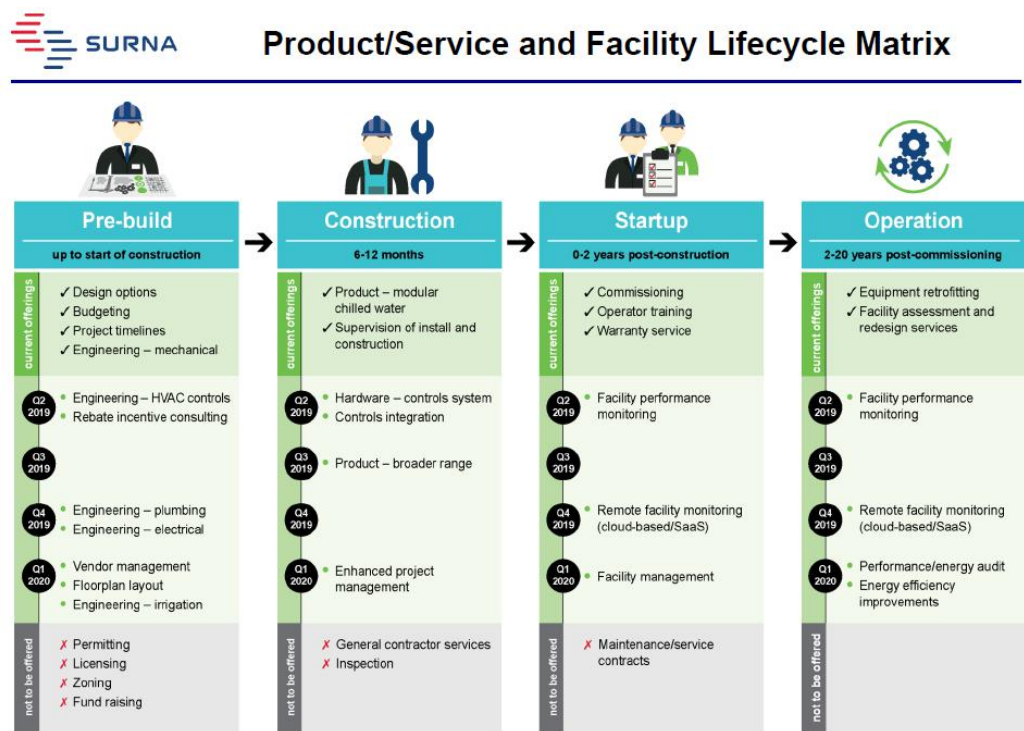
We have three core assets that we intend to leverage as part of our going forward business strategy. First, we have multi-year relationships with customers and others in the industry. Second, we have specialized engineering know-how and experience gathered from designing environmental control systems for over 200 licensed, commercial cannabis cultivators. Third, we have a line of proprietary environmental control products.

We believe we are well positioned in the industry and, to our knowledge, are the only integrated provider of proprietary environmental control equipment and engineering serving the cannabis space. Further, we believe our employees have more experience than any other mechanical engineering firm serving this industry. Our customers engage us for their environmental and climate control systems because they want experts to design their facilities, and they come to us because of our reputation. We leverage our reputation and know-how against the local contractors and mechanical engineers who collectively constitute our largest competitors.

Our new business plan and strategy is to expand our business with our customers in two ways: (i) by offering a broader range of products and services, and (ii) by addressing a wider range of our customer needs. We believe this plan will take over two years to fully implement. The fiscal objectives of this new strategy are three-fold: (i) diversify our sales by adding recurring, and more consistent and predictable, revenue streams, (ii) achieve revenue growth at a faster rate than operating expenses, and (iii) seek to increase our gross margin by shifting our focus to value-added technology services and proprietary, customized equipment.

If successful, our new product and service initiatives could be “game-changers” for us by providing a more predictable, steady and recurring revenue stream as compared to our traditional one-time engineering/design/equipment projects that, while large in dollar value, were inconsistent and unpredictable and subject to licensing, permitting, funding uncertainties and other factors outside of our control. We believe our new product, service and technology offerings will be attractive to our customers and potentially represent a more consistent revenue stream to the Company.

Our strategy to offer more products and services to address the wider range of our customers’ needs is illustrated by the following matrix of product/service depth and facility lifecycle participation.



Cultivation Facility Lifecycle

We previously provided a one-time engineering/design and equipment package primarily in only two of the four principal phases: Pre-build and Construction. As a result, we relinquished opportunities for building longer-term relationships with existing customers and their facilities in the latter two phases: Startup and Operation. Going forward, we will attempt to become “stickier” to our customers by providing products and services across the entire 4-phase facility lifecycle. Each phase of the facility lifecycle has many activities that are opportunities for us, some of which we will pursue. We do not intend to offer products and services in all activities in each phase, but rather we will focus on those that provide value-add to our customers.

Pre-build. This phase includes budgeting, design options, project timelines, floorplan layout, engineering (mechanical, electrical, plumbing, irrigation), vendor management, permitting, licensing, zoning and fund raising. We intend to focus on budgeting, design, floor planning and engineering services.

Construction. This phase includes general contractor services, installation and construction, project management, environmental and climate control products, controls systems, controls integration, contractor management, and inspection. We intend to focus on environmental and climate control products, and control systems.

Startup. This phase includes commissioning, operator training, warranty service, facility management, facility performance monitoring, and maintenance/service contracts. Over time, we expect to be involved to some degree in all of these activities, except maintenance/service contracts.

Operation. This phase includes upgrades and replacements, retrofit/design, energy audit, energy efficiency improvements, and performance audits. Again, over time, we expect to be involved to some degree in all of these activities. We are currently evaluating various strategic partnerships with software, consulting and engineering firms that specialize in utility data collection, rate analysis and rebate programs and provide facility energy auditing and modeling.

Products and Services

We will also offer a deeper range of products and services than the mechanical engineering and modular chilled water systems we historically offered. This includes products and services targeting smaller indoor grow facilities that typically purchase from retailers as well as sealed greenhouse, or hybrid, facilities.

Services: Engineering and Design. Previously, we provided basic engineering and design work, which has steadily improved over the years as we transitioned to larger and more sophisticated commercial projects, and our reputation today reflects this reality. Going forward, we will: (i) expand and emphasize a strong internal mechanical engineering team, with our own professional engineers who have PE (licensed professional engineer) and LEED (leadership in energy and environmental design) credentials, (ii) offer energy modeling to help our customers and enhance our sales closing rate, (iii) produce engineering and design work at industry standards that general contractors expect and need, (iv) develop an engineering, design and audit services program for the expanding retrofit market, which remediates existing grow facilities that suffer from sub-optimal performance, and (v) offer a comprehensive facility management program consisting of facility/performance monitoring, upgrades, warranty, retrofits, energy and efficiency audits, data collection and analytics.

Our technical experience and know-how in designing indoor cannabis cultivation facilities allow us to deliver to our customers practical solutions to complicated problems in three primary areas: (i) precision climate and environmental controls, (ii) energy and water efficiency, and (iii) building code and permitting. Our engineering design typically includes all mechanical components of a climate control system: cooling and heating, dehumidification, ventilation, air sanitation and odor control. We provide load calculations, equipment specifications, and engineered systems drawings for both the cultivation and comfort cooling portions of our customers' facilities. We also have experience in, or knowledge of, state and local permitting and code compliance for cannabis facilities in states and provinces where cannabis has been legalized for either recreational or medical use or is expected to be legalized, and we provide stamped, engineered drawings in all states and provinces where we operate.

Our competitive advantages are our experience and reputation. Since 2006, we have been continuously improving our facility designs which we believe distinguishes us from our competition, including local heating, ventilation and air conditioning ("HVAC") contractors, traditional HVAC design consultants, and others who may lack our cannabis-specific expertise. Indoor sealed grow facilities present a very difficult mechanical engineering challenge, and traditional mechanical engineers, without our cannabis experience, are typically unfamiliar with the precise climate and air control requirements needed for such facilities. As important, they may be unable to effectively navigate the local code and permitting rules which did not contemplate cannabis cultivation facilities when enacted. With our engineering design resources and experience, we are able to provide a code-compliant mechanical plan set in any state or province by collaborating with local regulators and our customers to come up with creative solutions that not only meet the intent of the local codes but also address concerns about the growing energy and resource usage of these facilities.

Energy use is, and will continue to be, a primary concern for indoor cultivators and regulators. According to industry sources, legal cannabis cultivation in the U.S. consumed an estimated 1.1 million megawatt hours (MWh) of electricity-based energy in 2017, enough to power 92,500 homes for a year. This consumption is expected to increase 162% from 2017 to 2022. The biggest components are HVAC and lighting which comprise approximately 50% and 40%, respectively, of a facility's energy use. Unsurprisingly, after labor, energy costs represent the second highest operating cost for indoor cultivators.

As a result, licensed producers are adopting practices to maximize energy efficiency and thereby reduce operating costs, which will become even more important as the industry matures and wholesale prices decline. These practices include water efficiency, LED lighting, and renewable energy alternatives. Sealed greenhouses, or hybrid facilities—which are insulated for energy efficiency and combine natural light with the use of artificial lights—also provide a more economical way to grow cannabis compared to indoor production. But regardless of whether indoor or a hybrid facility is the grow medium, precise environmental controls are required to deliver consistent product quality and yield. We are currently evaluating possible strategic partnerships with greenhouse facility providers that are seeking an environmental controls partner for this specific facility application.

We believe the right solution for our cultivation customers must provide tight temperature/humidity control, reduced fungus, pollen, pesticide and insect contamination risk ("bio-security"), minimized regulatory compliance risk, and lower maintenance complexity, costs and downtime. Our bio-security program uses a combination of a sealed facility and our customized approaches to air sterilization to maintain facility standards while destroying harmful airborne microbes without the production of byproducts. Additionally, our ductless modular chilled water systems using fan coil units within each grow room, isolate the air and potential contaminants within each room, while taking advantage of the energy efficiencies and redundancies offered by such systems. Our experience has shown that our precision environmental controls can reduce the reliance on the use of harmful pesticides and fungicides. We also believe our experience in the tightly regulated Canadian market where pharmaceutical-like standards (including Good Manufacturing Practice standards) exist for filtration, air quality and post-harvest plant quality also gives us an advantage over our competitors, especially as product quality testing regulations continue to be enacted by state, provincial and local agencies.

These are perspectives that help conceptualize the complexity of the environmental controls systems that need to be deployed by indoor cultivators:

- Lighting. Lighting demand is 70 times more energy intensive than commercial office buildings. This lighting intensity creates heat, which when combined with plant transpiration to create humidity, creates the need for dehumidification and corresponding additional energy demand. Further complicating matters, lighting schedules and density must be adjusted for the clone, vegetative and flowering stages of cannabis cultivation, and associated variances in watering rates and temperature and humidity targets, which are usually adjusted based on photoperiod.
- HVAC. HVAC energy use is driven by the need to remove the heat emitted from lighting and the moisture released during the plant's evapotranspiration process, coupled with air circulation and odor and contaminant filtration requirements.
- Legacy Systems. Mechanical systems are often designed and/or installed poorly, which can increase energy consumption by up to 50%. Reasons include: (i) unlicensed cultivators deploying HVAC systems without an understanding of how HVAC control the growing environment, (ii) cultivators failing to understand the criticality of proper installation, commissioning and servicing of the equipment, even if properly designed, (iii) HVAC systems selected without understanding the interrelationship between sensible (cooling) and latent (moisture) factors, and (iv) most HVAC systems are designed for buildings for humans, not plants.
- High Value Crop. For an indoor 10,000-square foot plant canopy facility, and assuming a wholesale price of \$1,500 per pound, a single complete cannabis crop loss (out of a typical five harvests annually) could mean lost revenue of between \$600,000 to \$1,800,000, with the variance depending on the cultivator's yield efficiency, which we estimate ranges from one to three pounds per 25 square feet of plant canopy.

New technologies and applications, coupled with emerging cultivation techniques, are providing opportunities for increased efficiency, which we are positioned to deliver to our customers. Our engineering and technical sales team, which currently consists of 11 people, is fully qualified and committed to delivering energy and resource efficient solutions to commercial cultivators. Leveraging their technical competence, and our customers' increasing focus on energy efficiency, quality and yield, we intend to offer retrofit/design, energy audit, energy efficiency improvement, and performance audit services.

Products: Environmental Control Systems. Previously, we primarily sold modular chilled water systems. In the future, we will: (i) expand our product offering to include other HVAC solutions, such as custom air handling units, split systems, packaged roof-top units, self-contained and complex water chilled systems, (ii) complete the development of a branded, proprietary controls and monitoring offering (consisting of sensors, controllers, software, monitoring and a user interface) with the goal of eventually generating a recurring revenue stream, (iii) upgrade our proprietary equipment lines of fan coils, dehumidifiers, and chillers, and (iv) source customized, application-specific odor control and air sanitation products.

We believe we are a leading company in North America supplying a complete product line for environmental control and air sanitation systems for the indoor cannabis cultivation market. Since 2006, we have made it our mission to continuously expand our product line and improve the functionality of our equipment. Because of our market experience, we have gained valuable feedback and design insights from our customers, and we continue to innovate and respond as cultivation facilities have increased in both size and complexity. This experience positions us well to offer other HVAC solutions, beyond our traditional modular chilled water systems, to meet the diverse needs of our expanding customer base.

Specific Initiatives in Progress

Our execution plan consists of a series of inter-related initiatives, including: (i) leveraging our strong brand name, (ii) positioning and messaging “Surna as the expert” in environmental controls management; (iii) evaluating first-generation grow facilities as prospects for broader service and product offerings or retrofit work; and (iv) developing a corresponding marketing/service/product plan to address facility lifecycle revenue opportunities. The following are examples of specific product and service initiatives that we are already pursuing or assessing:

New Products and Services. With our engineering know-how, we have the internal resources to develop and offer more environmental control solutions, help more customers and expand our market reach without incurring significant incremental costs. We also completed a full review of our major equipment and hardware lines and have developed a line-up of new, more efficient and proprietary products that we will be rolling out over the next 18 months. We designed these products to meet the increasing demands of our customers.

We recently shipped various configurations of our new fan coil units to two projects with three more under contract. These Surna-branded models offer greater efficiency, design flexibility and control for growers using modular chilled water systems. Our proprietary products, such as our new fan coils, cannot be sourced elsewhere and this gives us greater pricing leverage, which we expect will result in increased margins.

During the second quarter of 2019, we are also planning to roll-out two standard-sized and custom air handler products, which will allow us to meet our customer needs in situations where a ducted air handler is the preferred solution as opposed to the ductless systems that we sell today.

We expect to be able to offer a utility rebate consulting service, beginning the second quarter of 2019, to help our new build customers obtain utility rebates. While this service is not expected to generate significant revenue, it should help us sell our environmental controls systems because our customers will be able to use these rebates to offset some of their capital costs.

We are also offering our new proprietary controls systems product to all new prospects.

Retrofit Market. While hundreds of new indoor cannabis cultivation facilities continue to be built every year, the installed base of first-generation cultivation facilities in the U.S. and Canada has grown into the thousands. Currently, we estimate there are over 3,000 existing cultivation facilities with approximately 8,000 legal cultivation licenses issued throughout the U.S. alone. As discussed above, many of these facilities have environmental control systems that control temperature, humidity, vapor pressure deficit, and CO₂, but were designed by mechanical engineers who lacked cannabis application-specific expertise, which is precisely what we have. Some of these facilities are now facing serious operational challenges maintaining the required indoor growing conditions, which may lead to large dollar crop loss, uneven product consistency and quality, and reduced yields. The industry is beginning to recognize the need for our specialized know-how and experience, and we plan to initiate a targeted outreach strategy to the operators of these first-generation facilities. Our facility retrofit projects present an expanded market opportunity for us beyond our typical new facility projects, which carry uncertainties associated with prospect identification, licensing, permitting and funding.

We recently completed a retrofit consulting project—the first of its kind for us—for a large, multi-facility cultivator, and thereafter received a \$1,000,000+ order to supply equipment to several of their cultivation facilities that have been operating ineffectively. This order is expected to be fulfilled, and the revenue recognized, in the second or third quarter of 2019.

By the third quarter of 2019, we expect to further refine our retrofit offering for first-generation grow facilities. We are internally developing a facility assessment, analysis and consulting service to assist existing facilities in solving their environmental controls challenges.

Sensors, Controls and Automation Business. In late 2018, we decided to focus our next major product initiative in the sensors, controls and automation (“SCA”) market. This is an important initiative for us for several reasons, from tactical to strategic. Cultivation facilities must have SCA to operate their HVAC equipment. In simple form, SCA is the thermostat in the room, with the occupant selecting the desired temperature set point, the wall thermostat (Sensor) detecting the actual temperature, and when the space temperature deviates from the desired set point the thermostat (Control) commands the furnace or air-conditioner to supply heated or cooled air to bring the room temperature back to the set point. In the case of the cultivation facilities that we serve, there are more environmental conditions to monitor and control (such as temperature, relative humidity, CO₂, lighting, system status, and more) than in a typical residential home.

Indoor cannabis growers also need to vary the environmental conditions depending on stage of plant growth (i.e., clone, vegetative and flowering stages of cannabis cultivation), time of day, and plant maturity. In a cultivation facility the desired conditions change many times during the plant’s growth cycle and even within a day, and this is most easily accomplished with a programmable environmental control system (Automation), not unlike a simple programmable thermostat in a home.

We have entered this business to satisfy our customer's needs that we did not previously address and that historically was provided by third-party controls contractors. Our entry into the SCA market helps both our customer's and our business. We are also advantageously positioned to offer SCA products because we will be one of the few mechanical systems providers in the market to offer both a branded, proprietary HVAC equipment package as well as a branded SCA product line. Our customers benefit because they are saved the extra work of finding and engaging a controls contractor, allowing them to get their facility up and running more quickly by taking one decision off the table and thereby establishing a single point of responsibility for controls implementation. We are also in a strong position to provide SCA because we know our proprietary equipment better than anyone, thereby ensuring smooth integration with our equipment products with no work scope shortcomings. Longer term, our customers will benefit by having us remotely monitor the status of the HVAC equipment in the facility, thereby avoiding potential catastrophic problems, up to and including total crop loss, as well as using artificial intelligence (AI) to aggregate environment and growing data for our customers to optimize energy use, operating efficiency, and product quality and yield.

From a tactical perspective, with limited incremental selling costs, our current sales team is positioned to offer our SCA package to nearly every prospect since every cultivation facility must have SCA technology. We believe this technology value-added solution gives us an opportunity to achieve incremental project revenue at margins above those of our traditional equipment product lines. Strategically, through our SCA package, we are also able to deepen our ongoing relationship with the customer which positions us for a long-term customer relationship by tethering us to the customer through a controls interface (dashboard) to their facility. Additionally, it positions us as a broad range provider of environmental control products and facility management services for the total lifecycle of the cultivation facility. While there are several other total controls systems providers, we believe that our industry know-how, experience and reputation will give us a compelling and competitive SCA offering.

We will sell Surna-branded precision sensors to measure temperature, humidity, and CO₂ levels, which are more accurate than typical HVAC sensors and are able to report within tighter tolerance levels. Our controllers will be purpose-built computers programmed by us to ensure our industrial environmental control equipment follows the engineered sequences of operation to obtain desired setpoints. Our sensors connect to our branded controllers through wires installed in the facility, and similarly they are wired to our HVAC equipment (e.g., chillers, fan coils and dehumidifiers) to direct these pieces of equipment. The controllers also provide a user interface on a screen so that they can be programmed and controlled to achieve the customer's environmental objectives, and the cultivator may also assess this data and react to alerts remotely.

We will be launching our SCA offering on April 2, 2019 at the Technology Pavilion of the Cannabis Conference in Las Vegas. Similar to the timing of our equipment offering, completion of the SCA portion of our sales contract will be subject to factors beyond our control and may take between six months to two years to be fully deployed following contract execution. While we have no project contracts that include our SCA offerings at this time, we have begun budgeting and quoting SCA systems with existing prospects and have recently presented quotes to about 10 potential customers. We also have a beta-site customer that has agreed to install our SCA products at one of their cultivation facilities.

Beginning in the second half of 2019, we believe that we will be able to sell our SCA package in at least 25% of our engineering/design/equipment projects, with that percentage increasing over time. More specifically, we hope to complete the installation of our branded SCA product in at least four projects in 2019. Additionally, our SCA package can be sold to most existing facilities on a retrofit basis.

One-off Strategic Alliances. We are also in the process of identifying and assessing one-off strategic alliances (e.g., joint ventures, co-marketing, distribution) that are low cost/low risk, easy to implement and execute, can leverage our brand recognition in the cannabis space, expand the offerings that our sales team can present to our past, present and future commercial cannabis cultivators and, most importantly, generate additional revenues and margins, with little incremental costs. We are currently in preliminary discussion with several potential strategic partners that offer a wide range of complimentary products and services, such as energy-efficient lighting, processing equipment, and cloud-based data aggregation and Artificial Intelligence platforms, which we can refer our customers because we are engaged at the early Pre-build phase.

There can be no assurance that we will be able to successfully execute any of these initiatives, or identify, test and develop new and improved products or services, or that such new products or services will generate revenue or profitability at the levels we expect. At this time, our efforts will be primarily focused on working with current and new strategic partners to jointly develop new and improved products and services with cannabis-specific applications, as opposed to seeking acquisitions.

New Construction Market Opportunities Follow Legislation

The demand for our environmental control systems currently is primarily driven by the construction of new cannabis cultivation facilities in the U.S. and Canada. New construction activity is, in turn, driven by state legislation approving either medical or recreational cannabis use. Recent regulatory changes involving medical and/or recreational cannabis use in various jurisdictions, such as California, Michigan, Oklahoma, Utah, Missouri and Canada, tend to be a leading indicator for the granting of licenses for new facility construction. As more new cultivation facilities become licensed, we in turn have an expanded set of potential customers that might buy our environmental control systems. However, since both medical and recreational cannabis use remains prohibited under U.S. federal law, uncertainty continues and tends to unfavorably impact the development and financing of new cannabis cultivation facilities in the U.S.

- In the U.S., a total of 33 states (and the District of Columbia) have legalized the medical use of cannabis for over 60 qualifying conditions. Following last year's mid-term elections, 10 states (and D.C.), with more than 50% of the U.S. population, have legalized access to cannabis for recreational use. With increasing consumer acceptance of cannabis and the growth of the industry as a whole, we believe the number of states that allow cannabis use is set to jump even higher in 2019. Consider the following data gathered from various industry sources and publications: In the U.S., over 24 million persons, or 9.9% of adults age 18 and over consume cannabis regularly, and 115 million persons (or 48%) report having consumed it at some point in their lifetimes.
- In states where cannabis is currently legal, sales of medical and recreational cannabis are forecast to grow from \$12.9 billion in 2019 to \$26.3 billion in 2025.
- There were 2.4 million registered U.S. medical cannabis patients in 2018, up 71% since 2014.

During the year ended December 31, 2018, we booked sales orders for 32 new build projects, each with a contract value over \$100,000, which we refer to as commercial-scale projects. This compares to 20 and 18 commercial-scale projects booked for the years ended December 31, 2017 and 2016, respectively. The California and Canadian markets continued to be strong in 2018. Despite our increased bookings for new commercial-scale projects in 2018, the timing for completion of these projects is largely dependent on customer-centric factors—outside of our control—such as industry uncertainty, project financing concerns, and the licensing and qualification of our prospective customers. Further, the increased complexity and size of our new projects also impacts the timing of completion, with larger projects typically taking more time to complete.

In 2018, the average contract value for our commercial-scale project bookings was \$408,000 compared to \$332,000 for 2017. During 2018, we also booked sales orders with a large, multi-state customer that has put on hold two projects in states where the current market conditions, including wholesale cannabis prices, are not favorable. We estimate that these two projects will not be completed within the next 24 months, and it is possible that they may be abandoned by our customer.

The following table sets forth our commercial-scale project bookings, based on the year the contract was executed and we received an initial deposit, by country/state.

	Number of New Commercial-Scale Project Bookings		
	2018	2017	2016
Canada	13	7	1
California	6	1	3
Colorado	-	2	3
Arizona	-	3	1
Oregon	-	2	2
Washington	3	1	3
Massachusetts	1	-	-
Ohio	1	-	-
Alaska	-	1	2
Rhode Island	1	1	-
Nevada	-	1	1
Texas	-	1	-
Michigan	4	-	-
New Mexico	1	-	-
Hawaii	-	-	1
Wisconsin	-	-	1
Maryland	1	-	-
Arkansas	1	-	-
Total	32	20	18

Our marketing efforts during 2019 will be targeted at owner/operators, investors and companies that are actively seeking licenses to produce cannabis in California, Michigan, Missouri, Oklahoma, Utah and Pennsylvania. These represent the largest markets, based on the state and local regulatory framework, for our products and services. In particular, Pennsylvania and Oklahoma require indoor growing, and Missouri is expected to issue cultivation licenses in 2019. However, as and when new states pass legislation, we will shift our priorities and/or add new salespeople to pursue new facility construction at the early stage.

Marketing and Selling Our Expanded Product and Service Offering

Our marketing and sales efforts in 2019 and beyond will be diversified into three vectors: (i) new commercial build projects, (ii) existing commercial retrofit projects, and (iii) retail sales.

New commercial build projects are our traditional market, where we provide engineering and/or environmental control products for new cannabis grow facilities. We will continue to pursue such projects with an expanded product and service offering, which we expect will increase our average project size and target margins. While we intend to reduce our trade show presence and expenditures, we are enhancing our outreach with a new marketing methodology which will consist of a new customer-aligned messaging and positioning platform that we believe will increase our lead generation for new projects, and in turn allow our sales force to more effectively convert these leads to new contract bookings.

Our direct salespeople are primarily focused on new (and soon, existing) commercial project sales (typically in excess of 4,000 square feet of plant canopy, although some may be smaller) with each covering a specific geographical territory:

- the Northeast region (which includes eastern Canada, and the U.S. East Coast);
- the Pacific Northwest region (which includes Washington, Oregon, Alaska and western Canada);
- the West Coast region (which currently includes all of California); and
- the Midwest region (which includes Michigan).

We currently do not have a salesperson in our Pacific Northwest sales territory, but we intend to fill this position in the second quarter of 2019. We also intend to expand our sales force as our resources allow.

Existing commercial retrofit projects represent a new opportunity that we have just begun to address. The estimated 3,000+ existing commercial grow facilities in North America are easier to identify than new build projects. We believe, based on evidence and our market knowledge, that some of these existing facilities have environmental control problems that we can help remediate. We also believe that the energy consumption of these facilities can be reduced, and we are developing services and products to help them realize savings. We have a full product and service offering in mind, but we expect that the roll-out will take up to two years. However, to expedite this roll-out, we are evaluating possible strategic partners that could add products and services that are an immediate value-add to our customers.

Over the last several years, we deemphasized our wholesale efforts to the hydroponic retail stores network while we focused on building our commercial business. However, over time, as we add new products that can be sold at retail, such as fans, dehumidifiers, and nutrient cooling systems, we intend to make a more focused effort on marketing to the major retail chains that serve the cannabis cultivator market. By the third quarter of 2019, we expect to develop a retail store sales and marketing strategy to leverage our growing product line, which we expect to fully implement by 2020.

Industry Presence

Our marketing outreach is conducted through three primary channels: magazine advertisement, our website, and industry trade shows.

Magazine Advertisement. We regularly advertise in major industry trade publications such as Cannabis Business Times, Cannabis Tech, Grow Opportunity (Canada), Grow Magazine (Canada), Marijuana Venture, and MJBiz Daily. Over time, we believe such advertisements have proven to be an effective business development tool.

Website. Our website is a consistent source of productive leads. We are currently revamping our website consistent with our new marketing methodology and expect that an update will be deployed in the second quarter of 2019.

Trade Shows. We regularly display at industry trade shows and conventions and conduct speaking engagements to achieve industry visibility and presence cost-effectively. In the past, we have attended most major trade and industry conventions including Lift Expo (Vancouver), CannaCon (Seattle), Cannabis Cultivation (Oakland), Lift Expo (Toronto), NCIA Cannabis Business Summit (San Jose), Cannabis World Congress & Business Expo (Los Angeles), CCIA/NCIA California Cannabis Business Conference (Anaheim) and the Marijuana Business Conference & Expo (Las Vegas), plus some smaller regional shows.

Several of our senior technical advisors and sales people also speak on climate control and energy efficiency at events sponsored by organizations such as National Cannabis Industry Association, Cannabis World Congress and Business Exposition and CannaCon and LIFT Vancouver and Toronto. These advisors and sales people are also frequently cited in industry-related publications. Our co-founder, Brandy Keen is also a member of Denver's Department of Public Health and Environment Cannabis Sustainability Work Group, whose mission is to promote sustainability in the cannabis industry through education, the development and dissemination of best practices, and the facilitation of dialogue between the cannabis industry, the community, and technical experts. Ms. Keen was also acknowledged as a contributor to the 2018 Cannabis Energy Report published by New Frontier Data, a leading cannabis industry publisher.

We are a part of the Founder's Circle of Resource Innovations Institute ("RII"), with Ms. Keen being a member of their technical advisory committee. RII promotes and quantifies energy and water conservation in the cannabis industry. As a result of our Founder's Circle status, we have access to RII's data as well as speaking position opportunities at their seminars.

These programs give us industry exposure and allow us to showcase our experience in environment management for cannabis cultivation. With many new participants in the cannabis cultivation industry, we will also be able to provide existing and prospective customers with access to a Colorado-licensed indoor cultivation facility managed by Stephen Keen, one of our co-founders, for demonstration tours in a working indoor grow environment, which we believe may assist us in the sale of our products and services in the future. We also have a technical test and demonstration facility in our building where we are developing and refining our controls products.

New Facility Sales Cycle and Risks

The sales cycles for our new build commercial projects can vary significantly. From pre-sales and technical advisory meetings to sales contract execution, to engineering and design services and equipment delivery, and all the way through installation and commissioning of the installed system, the full cycle can range from six months to two years. Since we do not install the climate control systems, our customers are required to use third-party installation contractors, which adds to the variability of the sales cycle.

The length of our sales cycle for new facilities is driven by numerous factors including:

- the large number of first-time participants interested in the indoor cannabis cultivation business;
- the complexities and uncertainties involved in obtaining state and local licensure and permitting;
- local and state government delays in approving licenses and permits due to lack of staff or the large number of pending applications, especially in states where there is no cap on the number of cultivators;
- the customer's need to obtain cultivation facility financing;
- the time needed, and coordination required, for our customers to acquire real estate and properly design and build the facility (to the stage when climate control systems can be installed);
- the large price tag and technical complexities of the climate control and air sanitation system;
- availability of power; and
- delays that are typical in completing any commercial construction project.

Based on the foregoing factors, there are risks that we may not realize the full contract value of our backlog in a timely manner, or at all. The performance of our obligations under a sales contract, and the timing of our revenue recognition, is dependent upon our customers' ability to secure funding and real estate, obtain a license and then build their cultivation facility so they can take possession of the equipment. Our sales contracts currently are not time specific as to when our customers are required to take delivery of our services and equipment. More recently, we determined that some of our new construction facility projects are becoming larger and more complex and, as a result, delays were more likely due to licensing and permitting, lack of or delay in funding, staged facility construction, and/or the shifting priorities of certain customers with multiple facility projects in progress at one time. In order to address these risks, the obligations under these sales contracts are generally allocated into the following types of deliverables, and we typically require non-refundable payments from our customers in advance of our performance of services or delivery of equipment. However, in certain situations, especially as we expand our products and services offering for a customer's entire facility lifecycle (i.e., beyond Pre-build and Construction phases), we may extend credit to our customers in which case we are at risk for the collection of account receivables.

Engineering Services. First, we provide our customer with engineering and design services and drawings. In many cases, the engineering phase is done as part of the license application or building permit process and takes approximately six to eight weeks to complete. Our strategy is to secure the sales contract and commence the engineering and design portion of the project early in the customer's planning phase of the project. This is important for a number of reasons: (i) we can assist our customers with their engineering and design plans as part of their licensing application process as well as better assure the customer has the right-sized equipment for their application, leading to a higher probability of a successful grow, (ii) we are better positioned to utilize our proprietary equipment for the project at an earlier stage, and (iii) we are able to help reduce a customer's time to market. Before we commence the engineering phase of the project, we will generally require an advanced payment intended to cover the engineering value of the contract.

Surna Manufactured Equipment. Upon completion of the engineering and design phase, it may take our customer on average six to 12 months to complete the facility build-out, with possible delays due to financing or other aspects which are beyond our control as discussed above. Customer delays in obtaining financing and completing facility build-out make the completion timing of our sales contract unpredictable. For this reason, we require an additional advance payment before we begin manufacturing our proprietary equipment items.

Third-Party Manufactured Equipment. The final phase of our contract typically involves the delivery of third-party manufactured equipment items and other equipment to complete the project. We typically will not deliver until we receive a final advance payment for the remaining contract value. After the project is completed and the environmental control system has been fully installed by third-party installation contractors, we will deploy our technicians to the customer's cultivation facility to "commission" the system. Commissioning involves testing that the equipment has been properly assembled and installed by the installation contractor and assuring the equipment is operating within the agreed specifications.

Given the timing of the deliverables of our sales contracts, we often have experienced large variances in quarterly revenue. Our revenue recognition is dependent upon shipment of the equipment portions of our sales contracts, which, in many cases, may be delayed while our customers complete permitting, prepare their facilities for equipment installation or obtain project financing.

Competition

Our environmental control systems and our related engineering and design services compete with various national and local HVAC contractors and traditional HVAC equipment suppliers who traditionally resell, design, and implement climate control systems for commercial and industrial facilities, most of whom do not have the specific knowledge that we have about the complexities and challenges of cannabis cultivation. We have positioned ourselves to differ from these competitors by providing engineering and design services and environmental control systems, across all HVAC solutions, including modular chilled water systems, custom air handling units, split systems, packaged roof-top units, and self-contained and complex chilled-water systems, each tailored specifically for managing the distinct challenges involved in indoor cannabis cultivation. We believe our cannabis-specific applications and experience in this market allow us to deliver the right solution to our cultivation customers. Unlike many of our competitors, our solutions are designed specifically for cultivators to provide tight temperature/humidity control, reduce bio-security risk, reduce energy requirements, and minimize maintenance complexity, costs and downtime. However, as the legal cannabis market continues to grow, we expect increased competition in both the climate control systems and engineering services with some of these competitors attempting to emulate our cannabis specific-application model.

Intellectual Property

We rely on a combination of patent and trademark rights, trade secrets, laws that protect intellectual property, confidentiality procedures, and contractual restrictions with our employees and others to establish and protect our intellectual property rights. We have several pending patent applications, which include a combination of Patent Cooperation Treaty, utility and design patent applications that are directed to certain of our technologies. We have registered trademark registrations around our core Surna brand ("Surna") in the United States and select foreign jurisdictions, as well as the Surna logo and the combined Surna logo and name in the United States. Our wordmark is also registered in the European Union and Canada. Subject to ongoing use and renewal, trademark protection is potentially perpetual.

Employees

We currently have 25 full-time employees. However, we may engage, and have in the past utilized, the services of a number of consultants, independent contractors, and other non-employee professionals. Additional employees may be hired in the future depending on need, available resources, and our achieved growth.

Government Regulation

The use, possession, cultivation, and distribution of marijuana is prohibited by U.S. federal law for medical and recreational purposes. Although certain states have legalized medical and recreational cannabis, companies and individuals involved in the sector are still at risk of being prosecuted by federal authorities. Further, the landscape in the cannabis industry changes rapidly. This means that at any time the city, county, or state where cannabis is permitted can change the current laws and/or the federal government can supersede those laws and take prosecutorial action. Given the uncertain legal nature of the cannabis industry, it is imperative that investors understand that investments in the cannabis industry should be considered very high risk. A change in the current laws or enforcement policy can negatively affect the status and operation of our business, require additional fees, stricter operational guidelines and unanticipated shut-downs.

See the "*Risks Related to the Cannabis Industry*" set forth in Item 1A of this Annual Report which addresses various risks related to U.S. and foreign regulation and enforcement of cannabis laws and regulations and their potential impact on our business.

Available Information

Our website address is www.surna.com. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to reports filed pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), are filed with the U.S. Securities and Exchange Commission (the "SEC"). Such reports and other information filed by us with the SEC are available free of charge through our website when such reports are available on the SEC's website.

The SEC maintains an Internet site that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC at www.sec.gov.

The contents of the websites referred to above are not incorporated into this filing. Further, references to the URLs for these websites are intended to be inactive textual references only.

Item 1A. Risk Factors

Investing in our common stock involves a number of significant risks. Certain factors may have a material adverse effect on our business, financial condition, and results of operations. You should consider carefully the risks and uncertainties described below, in addition to other information contained in this Annual Report on Form 10-K, including our consolidated financial statements and related notes. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties that we are unaware of, or that we currently believe are not material, may also become important factors that adversely affect our business. If any of the following risks actually occurs, our business, financial condition, results of operations, and future prospects could be materially and adversely affected. In that event, the trading price of our common stock could decline, and you could lose part or all of your investment.

Risks Relating to Our Business

We are solely dependent upon the funds we have raised so far to continue our operations, which may be insufficient to achieve significant revenue, and we may need to obtain additional financing, which may not be available to us and could dilute the ownership of current shareholders.

Historically, we have raised equity and debt capital to support our operations. We anticipate we will require additional cash resources to finance our growth or other future developments, including the launch of our new product and service initiatives and any investments or acquisitions we may decide to pursue. As of December 31, 2018, we had a working capital deficit of approximately \$923,000 and our cash balance was \$253,000. We are likely to need additional funds to complete further development of our business plan to achieve a sustainable sales level where ongoing operations can be funded from operations. We currently have no debt obligations. During 2017 and 2018, we completed private placement unit offerings, consisting of common stock and warrants, to accredited investors raising aggregate proceeds of \$5,663,000. We will likely need to raise debt or equity financing in the future in order to continue our operations and achieve our growth targets. However, there can be no assurance that such financing will be available in sufficient amounts and on acceptable terms, when and if needed, or at all. The precise amount and timing of our funding needs cannot be determined accurately at this time, and will depend on a number of factors, including market demand for our products and services, the success of our product development efforts, the timing of receipts for customer payments, the management of working capital, and the continuation of normal payment terms and conditions for our purchase of goods and services. We believe our cash balances and cash flow from operations will be insufficient to fund our operations and growth for the next 12 months. If we are unable to substantially increase revenues, reduce expenditures, or otherwise generate cash flows from operations, then we will likely need to raise additional funding to continue our operations. Our failure to obtain sufficient financing on acceptable terms and conditions could have a material adverse effect on our growth prospects and our business, financial condition and results of operations.

To the extent that we raise additional equity capital, existing shareholders will experience a dilution in the voting power and ownership of their common stock, and earnings per share, if any, would be negatively impacted. Our inability to use our equity securities to finance our operations could materially limit our growth. Any borrowings made to finance operations could make us more vulnerable to a downturn in our operating results, a downturn in economic conditions, or increases in interest rates on borrowings that are subject to interest rate fluctuations. The amount and timing of such additional financing needs will vary principally depending on the timing of new product launches, investments and/or acquisitions, and the amount of cash flow from our operations. If our resources are insufficient to satisfy our cash requirements, we may seek to issue additional equity or debt securities or obtain a credit facility.

Our independent registered public accounting firm has expressed substantial doubt about our ability to continue as a going concern.

We have determined that our ability to continue as a going concern is dependent on raising additional capital to fund our operations and ultimately on generating future profits. Our independent registered public accounting firm has also included a "going concern" explanatory paragraph in its opinion on our financial statements, expressing substantial doubt that we can continue as an ongoing business for the next 12 months. Our financial statements do not include any adjustments that may result from the outcome of this uncertainty. If we are unable to successfully raise the capital we need, we may need to and believe we can reduce the scope of our business to fully satisfy our future short-term liquidity requirements. If we cannot raise additional capital or reduce the scope of our business, we may be otherwise unable to achieve our goals or continue our operations. While we believe that we will be able to raise the capital we need to continue our operations, there can be no assurances that we will be successful in these efforts or will be able to resolve our liquidity issues or eliminate our operating losses.

Even if we obtain more customers, there is no assurance that we will be able to convert our backlog into revenue or make a profit.

We may be unable to convert the full contract value of our backlog in a timely manner, or at all. The performance of our obligations under a sales contract, and the timing of our revenue recognition, is dependent upon our customers' ability to secure funding and real estate, obtain a license and then build their cultivation facility so they can take possession of the equipment. Our sales contracts currently are not time specific as to when our customers are required to take delivery of our services and equipment. More recently, we determined that some of our new construction facility projects are becoming larger and more complex and, as a result, delays were more likely due to licensing and permitting, lack of or delay in funding, staged facility construction, and/or the shifting priorities of certain customers with multiple facility projects in progress at one time. Even if we obtain more customers, or increase the average size of our projects, there is no guarantee that we will be able to generate a profit. Because we are a small company with limited capital, limited products and services, and limited marketing activities, we may not be able to generate sufficient revenue to operate profitably. If we cannot operate profitably, we may have to suspend or cease operations.

We may extend credit to our customers in the future and, if we are unable to collect these accounts receivable, our future profitability could be adversely impacted.

Historically, we had little exposure to the collection risk on accounts receivable since we typically received payments from our customers in advance of our performance of services or delivery of equipment. However, in certain situations, especially as we expand our products and services offering for a customer's entire facility lifecycle (i.e., beyond Pre-build and Construction phases), we may extend credit to our customers in which case we are at risk for the collection of account receivables. Accordingly, we will be at greater risk for the collection of account receivables. Our credit arrangements are negotiated and may not protect us if a customer develops operational difficulty or incurs operating losses which could lead to a bankruptcy. In these cases, we may lose most of the outstanding balance due. In addition, we are typically not able to insure our accounts receivables. The risk is that we derive our revenue and profits from selling products and services to the emerging cannabis industry. The failure of our customers to pay in full amounts due to us could negatively affect future profitability.

Because we currently do not maintain effective internal controls over financial reporting, we may be unable to accurately report our financial results or prevent fraud, and investor confidence and the market price of our common stock may, therefore, be adversely impacted.

Our reporting obligations as a public company place a significant strain on our management, operational and financial resources, and systems, and will continue to do so for the foreseeable future. Annually, we are required to prepare a management report on our management's assessment of the effectiveness of our internal control over financial reporting. Management has concluded that our internal control over financial reporting is currently not effective and shall report such in management's report in this annual report on Form 10-K. In the event that our status with the SEC changes to that of an accelerated filer from a smaller reporting company, our independent registered public accounting firm will be required to attest to and report on our management's assessment of the effectiveness of our internal control over financial reporting. Under such circumstances, even if our management concludes that our internal control over financial reporting is effective, our independent registered public accounting firm may still decline to attest to our management's assessment, or may issue a report that is qualified, if it is not satisfied with our controls, or the level at which our controls are documented, designed, operated or reviewed, or if it interprets the relevant requirements differently from us.

We have identified a material weakness in our internal control over financial reporting and, if we do not remediate the material weakness or are unable to implement and maintain effective internal control over financial reporting in the future, the accuracy and timeliness of our financial reporting may be adversely affected.

We currently do not maintain effective controls over certain aspects of the financial reporting process because: (i) we lack a sufficient complement of personnel with a level of accounting expertise and an adequate supervisory review structure that is commensurate with our financial reporting requirements, (ii) there is inadequate segregation of duties due to the limitation on the number of our accounting personnel, and (iii) we have insufficient controls and processes in place to adequately verify the accuracy and completeness of spreadsheets that we use for a variety of purposes including revenue, taxes, stock-based compensation and other areas, and place significant reliance on, for our financial reporting. A material weakness is a deficiency or a combination of deficiencies in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of the annual or interim consolidated financial statements will not be prevented or detected on a timely basis. If we are unable to achieve effective internal control over financial reporting, or if our independent registered public accounting firm determines we continue to have a material weakness in our internal control over financial reporting, we could lose investor confidence in the accuracy and completeness of our financial reports, the market price of our shares could decline, and our reputation may be damaged.

Our inability to effectively manage our growth could harm our business and materially and adversely affect our operating results and financial condition.

Our strategy envisions growing our business. We plan to expand our product, sales, administrative and marketing operations. Any growth in or expansion of our business is likely to continue to place a strain on our management and administrative resources, infrastructure and systems. As with other growing businesses, we expect that we will need to further refine and expand our business development capabilities, our systems and processes and our access to financing sources. We also will need to hire, train, supervise, and manage new employees. These processes are time consuming and expensive, will increase management responsibilities and will divert management attention. We cannot assure that we will be able to:

- execute on our new business plan and strategy;
- expand our products effectively or efficiently or in a timely manner;
- allocate our human resources optimally;
- meet our capital needs;
- identify and hire qualified employees or retain valued employees; or
- effectively incorporate the components of any business or product line that we may acquire in our effort to achieve growth.

Our inability or failure to manage our growth and expansion effectively could harm our business and materially and adversely affect our operating results and financial condition.

Our operating results may fluctuate significantly based on customer acceptance of our products, industry uncertainty, project financing concerns, and the licensing and qualification of our prospective customers. As a result, period-to-period comparisons of our results of operations are unlikely to provide a good indication of our future performance.

Management expects that we will experience substantial variations in our revenues and operating results from quarter to quarter. Our revenue recognition is dependent upon shipment of the equipment portions of our sales contracts, which, in many cases, may be delayed while our customers complete permitting, prepare their facilities for equipment installation or obtain project financing. Industry uncertainty, project financing concerns, and the licensing and qualification of our prospective customers, which are out of our control, make it difficult for us to predict when we will recognize revenue. If customers are unable to obtain licensing, permitting or financing, our sales and revenue will decline, resulting in a reduction in our operating income or possible increase in losses.

If we do not successfully develop additional products and services, or if such products and services are developed but not successfully commercialized, we could lose revenue opportunities.

Our future success depends, in part, on our ability to expand our product and service offerings. We are currently investigating a number of new and improved product opportunities, and we intend to collaborate with manufacturing partners to optimize these products for the cannabis market. The processes of identifying and commercializing new products is complex and uncertain, and if we fail to accurately predict customers' changing needs and emerging technological trends our business could be harmed. We have already and may have to continue to commit significant resources to commercializing new products before knowing whether our investments will result in products the market will accept. We may be unable to differentiate our new products from those of our competitors, and our new products may not be accepted by the market. There can be no assurance that we will successfully identify additional new product opportunities, develop and bring new products to market in a timely manner, or achieve market acceptance of our products or that products and technologies developed by others will not render our products or technologies obsolete or noncompetitive. Furthermore, we may not execute successfully on commercializing those products because of errors in product planning or timing, technical hurdles that we fail to overcome in a timely fashion, or a lack of appropriate resources. This could result in competitors providing those solutions before we do and a reduction in revenue and earnings.

Our future success depends on our ability to grow and expand our customer base. Our failure to achieve such growth or expansion could materially harm our business.

Our success and the planned growth and expansion of our business depend on us achieving greater and broader acceptance of our products and services and expanding our commercial customer base. There can be no assurance that customers will purchase our services or products or that we will continue to expand our customer base. If we are unable to effectively market or expand our product and service offerings, we will be unable to grow and expand our business or implement our business strategy. This could materially impair our ability to increase sales and revenue, and materially and adversely affect our margins, which could harm our business and cause our stock price to decline.

Our suppliers could fail to fulfill our orders for parts used to assemble our products, which would disrupt our business, increase our costs, harm our reputation, and potentially cause us to lose our market.

We depend on third party suppliers around the world, including in The People's Republic of China, for materials used to assemble our products. These suppliers could fail to produce products to our specifications or in a workmanlike manner and may not deliver the material or products on a timely basis. Our suppliers may also have to obtain inventories of the necessary parts and tools for production. Any change in our suppliers' approach to resolving production issues could disrupt our ability to fulfill orders and could also disrupt our business due to delays in finding new suppliers, providing specifications and testing initial production. Such disruptions in our business and/or delays in fulfilling orders could harm our reputation and could potentially cause us to lose our market.

International trade disputes could result in tariffs and other protectionist measures that could adversely affect the Company's business.

Tariffs could increase the cost of our products and the components and raw materials that go into making them. These increased costs could adversely impact the gross margin that we earn on sales of our products. Tariffs could also make our products more expensive for customers, which could make our products less competitive and reduce customer demand. Countries may also adopt other protectionist measures that could limit our ability to offer our products and services.

Our inability to effectively protect our intellectual property would adversely affect our ability to compete effectively, our revenue, our financial condition, and our results of operations.

We may be unable to obtain intellectual property rights to effectively protect our branding, products, and other intangible assets. Our ability to compete effectively may be affected by the nature and breadth of our intellectual property rights. While we intend to defend against any threats to our intellectual property rights, there can be no assurance that any such actions will adequately protect our interests. If we are unable to secure intellectual property rights to effectively protect our branding, products, and other intangible assets, our revenue and earnings, financial condition, or results of operations could be adversely affected.

We also rely on non-disclosure and non-competition agreements to protect portions of our intellectual property portfolio. There can be no assurance that these agreements will not be breached, that we will have adequate remedies for any breach, that third parties will not otherwise gain access to our trade secrets or proprietary knowledge, or that third parties will not independently develop competitive products with similar intellectual property.

Our industry is highly competitive, and we have less capital and resources than many of our competitors, which may give them an advantage in developing and marketing products similar to ours, or make our products obsolete.

We are involved in a highly competitive industry where we compete with national and local HVAC contractors and traditional HVAC equipment suppliers who offer products and services similar to those that we sell. These competitors may have far greater resources than we do, giving our competitors an advantage in developing and marketing products and services similar to ours or products that make our products obsolete. While we believe we are better positioned to meet the exacting demands of a cannabis cultivation environment through precise temperature, humidity, light, and process controls and to satisfy the evolving code and regulatory requirements being imposed at the state and local levels, there can be no assurance that we will be able to successfully compete against these other contractors and suppliers.

We will be required to attract and retain top quality talent to compete in the marketplace.

We believe our future growth and success will depend in part on our ability to attract and retain highly skilled managerial, product development, sales and marketing, and finance personnel. Our ability to attract and retain personnel with the requisite credentials, experience and skills will depend on several factors including, but not limited to, our ability to offer competitive wages, benefits and professional growth opportunities. There can be no assurance of success in attracting and retaining such personnel. Shortages in qualified personnel could limit our ability to increase sales of existing products and services and launch new product and service offerings.

We are dependent upon certain key sales, managerial and executive personnel for our future success. If we lose any of our key personnel, our ability to implement our business strategy could be significantly harmed.

We depend on the industry knowledge, technical and financial skill, and network of business contacts of certain key employees. Our future success will depend to a significant extent on the continued service of these key employees. While we may have employment agreements with certain of these key employees, they are free to terminate their employment with us at any time, although they may be subject to certain restrictive covenants on their post-termination activities. We do not carry key-man life insurance on the lives of our key employees. The departure of any one of our key employees could have a material adverse effect on our ability to achieve our business objective and maintain the specialized services that we offer our customers.

System security risks, data protection breaches, cyber-attacks and systems integration issues could disrupt our internal operations or services provided to customers, and any such disruption could reduce our expected revenue, increase our expenses, damage our reputation and adversely affect our stock price.

Experienced computer programmers and hackers may be able to penetrate our network security and misappropriate or compromise our confidential information or that of third parties, create system disruptions or cause shutdowns. Computer programmers and hackers also may be able to develop and deploy viruses, worms, and other malicious software programs that attack or otherwise exploit any security vulnerabilities of the products that we may sell in the future. The costs to us to eliminate or alleviate cyber or other security problems, bugs, viruses, worms, malicious software programs and security vulnerabilities could be significant, and our efforts to address these problems may not be successful and could result in interruptions, delays, cessation of service and loss of existing or potential customers that may impede our engineering, sales, manufacturing, distribution or other critical functions.

Portions of our IT infrastructure may also experience interruptions, delays or cessations of service or produce errors in connection with systems integration or migration work that takes place from time to time. We may not be successful in implementing new systems and transitioning data, which could cause business disruptions and be more expensive, time consuming, disruptive and resource-intensive. Such disruptions could adversely impact our ability to fulfill orders and interrupt other processes. Delayed sales, lower profits, or lost customers resulting from these disruptions could adversely affect our financial results, stock price and reputation.

We incur significant costs as a result of being a public company, which will make it more difficult for us to achieve profitability.

As a public company, we incur legal, accounting and other expenses, including costs associated with the periodic reporting requirements applicable to a company whose securities are registered under the Exchange Act, as well as additional corporate governance requirements, including requirements under the Sarbanes-Oxley Act, and other rules implemented by the SEC. These costs will make it more difficult for us to achieve profitability.

Our ability to use net operating losses to offset future taxable income may be subject to limitations.

As of December 31, 2018, we had federal and state net operating loss carryforwards of \$15,626,000. Our ability to deduct these net operating loss carryforwards against future taxable income is contingent on our generation of future taxable income. Our federal and state net operating loss carryforwards generated through December 31, 2017 will expire, if not utilized, in the years 2034 through 2037. NOLs generated subsequent to December 31, 2017 do not expire but may only be used against taxable income to 80%. These net operating loss carryforwards could expire unused and be unavailable to offset future income tax liabilities. Under the newly enacted federal income tax law, federal net operating losses incurred in 2018 and in future years may be carried forward indefinitely, but the deductibility of such federal net operating losses is limited. It is uncertain if and to what extent various states will conform to the newly enacted federal tax law. In addition, under Section 382 of the Code, and corresponding provisions of state law, if a corporation undergoes an "ownership change," which is generally defined as a greater than 50% change, by value, in its equity ownership over a three-year period, the corporation's ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes to offset its post-change income or taxes may be limited. We have experienced ownership changes in the past and we may experience additional ownership changes in the future as a result of subsequent shifts in our stock ownership, some of which may be outside of our control. If an ownership change occurs and our ability to use our net operating loss carryforwards is materially limited, it would harm our future operating results by effectively increasing our future tax obligations.

Risks Related to the Cannabis Industry

U.S. federal laws, regulations and enforcement may adversely affect the implementation of state and local cannabis laws and regulations and, correspondingly, may adversely impact our customers. Such impact may negatively affect our revenue and profits, or we may be found to be in violation of the Controlled Substances Act or other U.S. federal, state or local laws.

Currently, 33 states and the District of Columbia permit some form of whole-plant cannabis use and cultivation either for medical or recreational use. There are efforts in many other states to begin permitting cannabis use and/or cultivation in various contexts, and there are a number of states are actively considering bills to permit recreational use. Nevertheless, the U.S. federal government continues to prohibit cannabis in all its forms as well as its derivatives. Under the federal Controlled Substances Act (the “CSA”), the policy and regulations of the U.S. federal government and its agencies is that marihuana, or its more commonly spelled name marijuana, has no currently accepted medical use and a high potential for abuse, and a range of activities, including cultivation and use of marijuana, is prohibited.

In December of 2018, the Agricultural Improvement Act of 2018 (the “2018 Farm Act”) was enacted into law which included an amendment to wholly remove “hemp” from the CSA and defined “hemp” as all parts of a cannabis plant containing less than 0.3% of tetrahydrocannabinol (“THC”) thereby excluding hemp and its derivatives, including hemp-derived cannabidiol (“CBD”) oil, as a “controlled substance.” Under the 2018 Farm Act, the cultivation of hemp is no longer prohibited under federal law, although the U.S. Department of Agriculture has not yet issued guidance for the regulation of such cultivation by state departments of agriculture. Further, although hemp-derived CBD is now federally legal under the 2018 Farm Act, the U.S. Food and Drug Administration has regulatory oversight on the use of hemp-derived CBD in food, beverage and dietary products as well as any medical or therapeutic claims related thereto. Cannabis-derived CBD oil remains federally illegal in the U.S. However, state laws vary on the permitted sale and use of both hemp-and cannabis-derived CBD oil.

Until Congress amends the CSA or the executive branch de-schedules or reschedules marijuana under it, there is a risk that federal authorities may enforce current federal law. Enforcement of the CSA by federal authorities could impair our revenue and earnings, and it could even force us to cease operating entirely in the cannabis industry. The risk of strict federal enforcement of the CSA in light of congressional activity, judicial holdings and stated federal policy, including enforcement priorities, remains uncertain.

In an effort to provide guidance to federal law enforcement, the U.S. Department of Justice (the “DOJ”) issued Guidance Regarding Marijuana Enforcement to all United States Attorneys in a memorandum from Deputy Attorney General David Ogden on October 19, 2009, in a memorandum from Deputy Attorney General James Cole on June 29, 2011 and in a memorandum from Deputy Attorney General James Cole on August 29, 2013 (the “Cole Memo”). The Cole Memo also had provided guidance to federal prosecutors concerning cannabis enforcement in light of state laws legalizing medical and recreational cannabis possession in small amounts. Each memorandum provided that the DOJ was committed to enforcement of the CSA, but the DOJ was also committed to using its limited investigative and prosecutorial resources to address the most significant threats in the most effective, consistent and rational way.

The Cole Memo sets forth certain enforcement priorities that are important to the federal government:

- Distribution of marijuana to children;
- Revenue from the sale of marijuana going to criminals;
- Diversion of medical marijuana from states where it is legal under state law to states where it is not;
- Using state-authorized marijuana activity as a pretext for other illegal drug activity;
- Violence in the cultivation and distribution of marijuana;
- Drugged driving and other adverse public health consequences;
- Growing marijuana on public lands; and
- Possession or use of marijuana on federal property.

On January 4, 2018, the Cole Memo was rescinded by Attorney General Jeff Sessions (the “Sessions Memo”). The effect of rescinding the Cole Memo guidance is that U.S. Attorneys now have greater discretion to prosecute CSA violations with respect to individuals and companies that are otherwise complying with state law and the tenets previously set forth in the Cole Memo. The DOJ has not historically devoted resources to prosecuting individuals whose conduct is limited to possession of small amounts of cannabis for use on private property but relied on state and local law enforcement to address that form of cannabis activity. In the event the DOJ goes beyond the objectives of the Cole Memo guidance and begins strict enforcement of the CSA in states that have laws legalizing medical and recreational cannabis in small amounts, there may be a direct and adverse impact to our revenue and earnings, and it could even force us to cease operating entirely in the cannabis industry.

In 2014, the U.S. House of Representatives passed an amendment (the "Rohrabacher-Farr Amendment") to the Commerce, Justice, Science, and Related Agencies Appropriations Bill, which funds the DOJ. The Rohrabacher-Farr Amendment prohibits the DOJ from using federally appropriated funds to prevent states with medical cannabis laws from implementing such laws by investigating and prosecuting individuals or businesses operating in accordance with applicable state laws. In August 2016, a Ninth Circuit federal appeals court ruled in *United States v. McIntosh* that the Rohrabacher-Farr Amendment bars the DOJ from spending funds on the prosecution of conduct that is allowed by state medical cannabis laws, provided that such conduct is in strict compliance with applicable state law. In March 2015, bipartisan legislation titled the Compassionate Access, Research Expansion, and Respect States Act (the "CARERS Act") was introduced, proposing to allow states to regulate the medical use of cannabis by changing applicable federal law, including reclassifying cannabis under the CSA to a Schedule II controlled substance and thereby changing the plant from a federally-criminalized substance to one that has recognized medical uses.

Although these developments have been met with a certain amount of optimism in the scientific community, the CARERS Act has not yet been adopted, and the Rohrabacher-Farr Amendment, as an amendment to an appropriations bill, must be renewed annually on a bipartisan basis in order to remain in effect. The Rohrabacher-Farr Amendment has been renamed the Rohrabacher-Blumenauer Amendment through the amendment language, but the intent remains the same. The currently enacted Commerce, Justice, Science, and Related Agencies Act, which includes the Rohrabacher-Blumenauer Amendment, is effective, by passage of continuing resolutions, through September 30, 2019. Following the Sessions Memo, however, the federal government could at any time change its enforcement priorities against the cannabis industry. Any change in enforcement priorities could render our operations unprofitable or even prohibit such operations.

The former Obama administration effectively stated that it is not an efficient use of resources to direct federal law enforcement agencies to prosecute those lawfully abiding by state-designated laws allowing the use and distribution of medical marijuana. However, as discussed above, the Sessions Memo rescinded the Cole Memo enforcement guidance. Any further change in enforcement policy and a decision to enforce the federal laws more aggressively could cause significant financial damage to us and our shareholders and could adversely affect our ability to obtain equity or debt financing, or even prohibit our operating in the cannabis industry entirely.

In June 2018, the Strengthening the Tenth Amendment Through Entrusting States (the "STATES Act") was introduced that would recognize legalization of cannabis and the U.S. state laws that have legalized it through their legislatures or citizen initiatives. The STATES Act, if enacted into law, would amend the CSA to exempt from federal enforcement individuals or corporations in states who are in compliance with U.S. state, U.S. territory and the District of Columbia, or tribal law on cannabis, with certain additional provisions such as minimum ages.

We have not requested or obtained any opinion of counsel or ruling from any authority to determine if our operations are in compliance with or violate any state or federal laws or whether we are assisting others to violate a state or federal law. In the event that our operations are deemed to violate any laws or if we are deemed to be assisting others to violate a state or federal law, we could have liability that could cause us to modify or cease our operations.

Our recent focus on and entrance into the cannabis industry in Canada presents significant opportunities, but it also presents significant risks that may ultimately affect the revenue and earnings of our business.

In addition to U.S. operations, we sell products and services to cannabis growers in Canada, where medical and recreational cannabis has been legal since 2018 across the country both federally and provincially (subject to certain restrictions relating to CBD). We believe Canada, with its federal legal regime, represents a significant business opportunity for us, but there can be no assurance that we will be able to make any additional sales of products or services in Canada. As a result, our revenue and earnings may be adversely affected.

Successful litigation by non-cannabis states affected by cannabis legalization could have significant adverse effects on our business.

Due to variations in state law among states sharing borders, certain states which have not approved any legal sale of cannabis may seek to overturn laws legalizing cannabis use in neighboring states. For example, in December 2014, the attorney general of each of Nebraska and Oklahoma filed a complaint with the U.S. Supreme Court against the state of Colorado arguing that the Supremacy Clause (Article VI of the U.S. Constitution) prohibits Colorado from passing laws that conflict with federal anti-drug laws and that Colorado's laws are increasing cannabis trafficking in neighboring states that maintain cannabis bans, thereby putting pressure on such neighboring states' criminal justice systems. In March 2016, the U.S. Supreme Court, voting 6-2, declined to hear this case, but there is no assurance that it will do so in the future. Additionally, nothing prevents states' attorneys general from using the same or similar cause of action for a lawsuit in a lower federal or other court.

Previously, the U.S. Supreme Court has held that drug prohibition is a valid exercise of federal authority under the commerce clause; however, it has also held that an individual state itself is not required to adopt or enforce federal laws with which it disagrees. If the U.S. Supreme Court rules that a legal cannabis state's legislation is unconstitutional, that could result in legal action against other states with laws legalizing medical and/or recreational cannabis use. Successful prosecution of such legal actions by non-cannabis states could have significant adverse effects on our business.

Variations in state and local regulation and enforcement in states that have legalized cannabis may impose certain restrictions on cannabis-related activities that may adversely impact our revenue and earnings.

Individual state laws do not always conform to the federal standard or to other states' laws. A number of states have decriminalized cannabis to varying degrees; other states have created exemptions specifically for medical cannabis, and several have both decriminalization and medical laws. Ten states and the District of Columbia have legalized the recreational use of cannabis and various state legislatures are considering recreational use while ballot measures regarding recreational use are likely to be submitted to voters in 2019. Variations exist among states that have legalized, decriminalized, or created medical cannabis exemptions. For example, Alaska and Colorado have limits on the number of cannabis plants that can be grown by an individual in the home. In most states, the cultivation of cannabis for personal use continues to be prohibited except by those states that allow small-scale cultivation by the individual in possession of cannabis for medicinal purposes or that person's caregiver. Active enforcement of state laws that prohibit personal cultivation of cannabis may indirectly and adversely affect our revenue and earnings.

As the possession and use of marijuana is illegal under the CSA, it is possible that our manufacture and sale of equipment that is used to cultivate marijuana may be deemed to be aiding and abetting illegal activities. It is also possible that our products could be considered "drug paraphernalia."

Federal practices could change with respect to providers of equipment potentially usable by cultivators in the medical and recreational cannabis industry, which could adversely impact us. Cannabis growers use equipment that we offer for sale. While we are not aware of any threatened or current federal or state law enforcement actions against any supplier of equipment that might be used for cannabis growing, law enforcement authorities, in their attempt to regulate the illegal use of cannabis, may seek to bring an action or actions against us, including but not limited to a claim of aiding and abetting, or being an accessory to, another's criminal activities or that our products are considered "drug paraphernalia."

The federal aiding and abetting statute, U.S. Code Title 18 Section 2(a), provides that anyone who "commits an offense against the United States or aids, abets, counsels, commands, induces or procures its commission, is punishable as a principal." Under U.S. Code Title 21 Section 863, the term "drug paraphernalia" means "any equipment, product or material of any kind which is primarily intended or designed for use in manufacturing, compounding, converting, concealing, producing, processing, preparing, injecting, ingesting, inhaling, or otherwise introducing into the human body a controlled substance." Any drug paraphernalia involved in any violation of Section 863 shall be subject to seizure and forfeiture upon the conviction of a person for such violation. While Section 863(f) contains an exemption for any person authorized by local, state or federal law to manufacture, possess, or distribute such items, any such action may force us to cease operations and our investors could lose their entire investment.

A risk exists that our activities could be deemed to be facilitating the selling or distribution of cannabis in violation of the CSA, or to constitute aiding or abetting, or being an accessory to, a violation of the CSA. There is also a risk that our products could be considered drug paraphernalia and could be subject to seizure. We believe, however, that such risks are relatively low. Federal authorities have not focused their resources on such tangential or secondary violations of the CSA, nor have they threatened to do so, with respect to the sale of equipment that might be used by cannabis cultivators, or with respect to any supplies marketed to participants in the medical and recreational cannabis industry. We are unaware of such a broad application of the CSA or the seizure of drug paraphernalia by federal authorities, and we believe that such an attempted application would be unc customary.

If the federal government were to change its practices, or were to expend its resources investigating and prosecuting providers of equipment that could be usable by participants in the medical or recreational cannabis industry, such action could have a materially adverse effect on our operations, our customers, or the sales of our products. As a result of such an action, we may be forced to cease operations and our investors could lose their entire investment.

The fact that we provide products and services to companies in the cannabis industry may impact our ability to raise adequate capital for future expansion, which could hinder our growth potential as well as our revenue and earnings.

A very large percentage, if not all, of our customers are operating in an industry that is still illegal under U.S. federal law. With the lingering uncertainty of federal enforcement, many potential investors, especially institutional investors, either refuse to invest in the industry or are very reluctant to make such investments. Our inability to raise adequate capital for future expansion could substantially hinder our growth potential as well as our revenue and earnings.

Our success may be dependent on additional states legalizing recreational and/or medical cannabis use.

Continued development of the recreational and medical cannabis markets is dependent upon continued legislative authorization of cannabis at the state level for recreational and/or medical purposes. Any number of factors could slow or halt the progress. Furthermore, progress, while encouraging, is not assured, and the process normally encounters set-backs before achieving success. While there may be ample public support for legislative proposals, key support must be created in the relevant legislative committee or a bill may never advance to a vote. Numerous factors impact the legislative process. Any one of these factors could slow or halt the progress and adoption of cannabis for recreational and/or medical purposes, which would limit the overall available market for our products and services, which could adversely impact our business, revenue and earnings.

Our customers may have difficulty accessing the service of banks, which may make it difficult for them to purchase our products and services.

As a result of the federal illegality of marijuana, many banks do not provide banking services to the cultivation and distribution segments of the cannabis industry, the argument being that they would be accepting for deposit funds derived from the operation of a federally illegal business. On February 14, 2014, the U.S. Department of the Treasury Financial Crimes Enforcement Network ("FinCEN") released guidance to banks "clarifying Bank Secrecy Act ("BSA") expectations for financial institutions seeking to provide services to marijuana-related businesses." In addition, there have been legislative attempts to allow banks to transact business with state-authorized cannabis businesses. While these are positive developments, there can be no assurance that legislation will be successful, or that, even with the FinCEN guidance, banks will decide to do business with cannabis companies, or that, in the absence of actual legislation, state and federal banking regulators will not strictly enforce current prohibitions on banks handling funds generated from an activity that is illegal under federal law. Moreover, the FinCEN guidance may be rescinded or amended at any time in order to reconcile the now conflicting guidance of the Sessions Memo. At present, few banks have taken advantage of the FinCEN guidance, resulting in many cannabis businesses still operating on an all-cash basis. This makes it difficult for cannabis businesses to manage their businesses, pay their employees and taxes, and having so much cash on hand also creates significant public safety issues. Many ancillary businesses that service cannabis businesses have to deal with the unpredictability of their clients or customers not having a bank account. The inability of our customers to open bank accounts and otherwise access the services of banks, including obtaining credit, may make it more difficult and costly for them to operate and more difficult for such customers to purchase our products and services, which could materially harm our business, revenue and earnings.

We are subject to certain federal regulations relating to cash reporting.

The BSA, enforced by FinCEN, requires us to report currency transactions in excess of \$10,000, including identification of the customer by name and social security number, to the Internal Revenue Service. This regulation also requires us to report certain suspicious activity, including any transaction that exceeds \$5,000 that we know, suspect or have reason to believe involves funds from illegal activity or is designed to evade federal regulations or reporting requirements and to verify sources of funds. Substantial penalties can be imposed against us if we fail to comply with this regulation. If we fail to comply with these laws and regulations, the imposition of a substantial penalty could have a material adverse effect on our business, financial condition and results of operations.

State and municipal governments in which our customers do business or seek to do business may have or may adopt laws that adversely affect our ability to do business with such customers.

While the federal government has the right to regulate and criminalize cannabis, state and municipal governments may adopt or amend additional laws and regulations that further criminalize or adversely affect cannabis businesses. States that currently have laws that decriminalize or legalize certain aspects of cannabis, such as medical marijuana, could in the future, reverse course and adopt new laws that further criminalize or adversely affect cannabis businesses. Additionally, municipal governments in certain states may have laws that adversely affect cannabis businesses, even though there are no such laws at the state level. For example, municipal governments may have zoning laws that restrict where cannabis operations can be located and the manner and size of which they can expand and operate. These municipal laws, like the federal laws, may adversely affect our customers' ability to do business. Also, given the complexity and rapid change of the federal, state and local laws pertaining to cannabis, our customers may incur substantial legal costs associated with complying with these laws and in acquiring the necessary state and local licenses required by their business endeavors. All of the foregoing may impact our customers' ability to purchase our products and services, which may adversely affect our business, revenue and earnings.

Most, if not all, of our customers are impacted by Section 280E of the Code, which limits certain expenses marijuana companies can deduct. This negative impact could affect the financial condition of our customers, which in turn may negatively affect the ability of our customers to purchase our products and services.

Section 280E of the Code forbids businesses from deducting otherwise ordinary business expenses from gross income associated with the "trafficking" of Schedule I or II substances, as defined by the CSA. The Internal Revenue Service (the "IRS") has subsequently applied Section 280E to state-legal cannabis businesses since marijuana is still a Schedule I substance. Section 280E states that no deductions should be allowed on any amount "in carrying on any trade or business if such trade or business consists of trafficking in controlled substances." Section 280E affects all businesses that engage in the cultivation, sale or processing of marijuana. This includes cultivators, medical dispensaries, marijuana retail stores and infused product manufacturers, as well as marijuana-derived concentrates and oil manufacturers. Because Section 280E limits certain deductions, it can have a dramatic effect on the profitability of these businesses, which in turn may adversely affect their ability to purchase our products and services. Such result may adversely impact our revenue and earnings.

Due to our involvement in the cannabis industry, we may have a difficult time obtaining the various insurances that are desired to operate our business, which may expose us to additional risk and financial liability

Insurance that is otherwise readily available, such as general liability, and directors and officer's insurance, is more difficult for us to find, and more expensive, because we are product and service providers to companies in the cannabis industry. There are no guarantees that we will be able to find such insurances in the future, or that the cost will be affordable to us. If we are forced to go without such insurances, it may prevent us from entering into certain business sectors, may inhibit our growth, and may expose us to additional risk and financial liabilities.

Risks Related to Our Common Stock

Our common stock price may be volatile and may decrease substantially.

The trading price of our common stock has fluctuated substantially, and we expect that it will continue to do so. The price of our common stock in the market on any particular day depends on many factors including, but not limited to, the following:

- price and volume fluctuations in the overall stock market from time to time;
- investor demand for our shares;
- significant volatility in the market price and trading volume of companies in the cannabis industry;
- variations in our operating results and market conditions specific to our business;
- the emergence of new competitors or new technologies;
- operating and market price performance of other companies that investors deem comparable;
- changes in our Board of Directors or management;
- sales or purchases of our common stock by insiders, including sales of our common stock issued to employees, directors and consultants under our equity incentive plan which were registered under the Securities Act of 1933, as amended (the "Securities Act") under our S-8 registration statement;
- commencement of, or involvement in, litigation;
- changes in governmental regulations, in particular with respect to the cannabis industry;
- actual or anticipated changes in our earnings, and fluctuations in our quarterly operating results;
- market sentiments about the cannabis industry;
- general economic conditions and trends; and
- departures of any of our key employees.

Presently, an exchange listing of our common stock is not likely since we are a U.S.-based company focused on the cannabis industry, which remains illegal under federal law. Moreover, we may not be able to attract institutional ownership of our stock or research analysts to cover our stock in the foreseeable future.

In the past, following periods of volatility in the market price of a company's securities, securities class action litigation has often been brought against that company. Due to the potential volatility of our stock price, we may therefore be the target of securities litigation in the future. Securities litigation could result in substantial costs and divert management's attention and resources from our business.

In addition, if the market for stocks in our industry, or the stock market in general, experiences a loss of investor confidence, the market price of our common stock could decline for reasons unrelated to our business, financial condition, or results of operations. If any of the foregoing occurs, it could cause the price of our common stock to fall and may expose us to lawsuits that, even if unsuccessful, could be costly to defend and a distraction to our Board of Directors and management.

The application of the “penny stock” rules could adversely affect the market price of our common shares and increase an investor’s transaction costs to sell those shares.

The SEC has adopted Rule 3a51-1, which establishes the definition of a “penny stock,” for the purposes relevant to us, as any equity security that has a market price of less than \$5.00 per share or with an exercise price of less than \$5.00 per share, subject to certain exceptions. For any transaction involving a penny stock, unless exempt, Rule 15c-9 requires:

- that a broker or dealer approve a person’s account for transactions in penny stocks, and
- the broker or dealer receives from the investor a written agreement to the transaction, setting forth the identity and quantity of the penny stock to be purchased.

In order to approve a person’s account for transactions in penny stocks, the broker or dealer must:

- obtain financial information and investment experience objectives of the person, and
- make a reasonable determination that the transactions in penny stocks are suitable for that person and the person has sufficient knowledge and experience in financial matters to be capable of evaluating the risks of transactions in penny stocks.

The broker or dealer must also deliver, prior to any transaction in a penny stock, a disclosure schedule prescribed by the SEC relating to the penny stock market, which, in highlight form:

- sets forth the basis on which the broker or dealer made the suitability determination, and
- that the broker or dealer received a signed, written agreement from the investor prior to the transaction.

Generally, brokers may be less willing to execute transactions in securities subject to the “penny stock” rules or involving the cannabis industry. This may make it more difficult for investors to dispose of our common stock and may cause a decline in the market value of our stock.

Our Board of Directors is authorized to reclassify any unissued shares of our preferred stock into one or more classes, which could convey special rights and privileges to its owners.

Our articles of incorporation permit our Board of Directors to reclassify any authorized but unissued shares of preferred stock into one or more classes. Our Board of Directors will generally have broad discretion over the size and timing of any such classification, subject to a finding that the classification and issuance of preferred stock is in our best interests. We are authorized to issue up to 350,000,000 shares of common stock and 150,000,000 shares of preferred stock. As of December 31, 2018, we had 224,989,794 shares of common stock issued and outstanding and 42,030,331 shares of preferred stock issued and outstanding. In the event our Board of Directors opts to classify a portion of our unissued shares of preferred stock into a class of preferred stock, those preferred shares would have a preference over our common stock with respect to dividends and liquidation. The cost of any classification would be borne by our existing common stockholders. The class voting rights of any preferred shares we may issue could make it more difficult for us to take some actions that may, in the future, be proposed by the Board of Directors and/or the holders of our common stock, such as a merger, exchange of securities, liquidation, or alteration of the rights of a class of our securities, if these actions were perceived by the holders of preferred shares as not in their best interests. These effects, among others, could have an adverse effect on your investment in our common stock.

Rule 144 contains risks for certain shareholders.

From time to time, we issue shares on an unregistered basis, which may be eligible for resale under SEC Rule 144 promulgated under the Securities Act. In the event there are shares outstanding that can be sold under Rule 144, there may be market pressure on our stock.

We do not intend to pay cash dividends on our common stock.

We currently are not profitable and do not expect to achieve profitability in the foreseeable future. We have never declared or paid dividends on our common stock. We intend to invest any available funds to continue to grow our revenue. Accordingly, we do not expect to pay cash dividends to our stockholders now or in the foreseeable future.

The market price of our shares of common stock may be adversely affected by the sale of shares by our management or large stockholders.

Sales of our shares of common stock by our officers or senior managers through 10b5-1 plans or otherwise or by large stockholders could adversely and unpredictably affect the price of our common stock. Additionally, the price of our shares of common stock could be affected even by the potential for sales by these persons. We cannot predict the effect that any future sales of our common stock, or the potential for those sales, will have on our share price. Furthermore, due to relatively low trading volume of our stock, should one or more large stockholders seek to sell a significant portion of their stock in a short period of time, the price of our stock may decline.

Item 1B. Unresolved Staff Comments

We are a smaller reporting company as defined by Rule 12b-2 of the Exchange Act, and therefore we are not required to provide information under this item.

Item 2. Properties

We own no real property. On June 27, 2017, we executed a lease, which became effective September 29, 2017, for our manufacturing and office space at 1780 55th Street, Boulder, Colorado 80301. The term of the lease commenced September 29, 2017 and continues through August 31, 2022. Our leased space is approximately 18,600 square feet. We believe that our lease is at market rates and that there is sufficient space available in the Boulder, Colorado area to obtain additional or other space if and when required.

Item 3. Legal Proceedings

There are 6,750,000 restricted stock units that have not been settled due to the failure of the recipient to pay the required withholding taxes based on the value of the underlying shares at the time of vesting. We have commenced litigation against the recipient to have these restricted stock units canceled.

We are not currently subject to any material legal proceedings, nor, to our knowledge, is any material legal proceeding threatened against us. From time to time, we may be a party to certain legal proceedings in the ordinary course of business, including proceedings relating to the enforcement of our rights under contracts with our customers. While the outcome of these legal proceedings cannot be predicted with certainty, we do not expect that these proceedings will have a material effect upon our financial condition or results of operations.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Common Stock

Our shares of common stock are quoted on the OTCQB operated by OTCMarkets under the symbol "SRNA." Over-the-counter market quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not necessarily represent actual transactions.

As of March 18, 2019, we had 144 shareholders of record and we believe we have approximately 16,950 beneficial shareholders.

Unregistered Share Issuance; Share Repurchase

In May 2018, we entered into a preferred stock option agreement with Stephen and Brandy Keen under which the Company had the right, but not the obligation, to acquire all 35,189,669 shares of preferred stock owned by the Keens (the "Preferred Stock") on or before April 30, 2020. Mr. Keen is a principal shareholder and was a former executive officer and director. Ms. Keen, the spouse of Mr. Keen, is also a principal shareholder and previously served as an executive officer and director. Pursuant to the preferred stock option agreement, upon our exercise of the option, we agreed to issue one share of our common stock for each 1,000 shares of Preferred Stock purchased by us. As consideration for the Keens' grant of the option, we paid them \$5,000. We exercised this option and, in December 2018, completed the repurchase by the Preferred Stock and issued 35,190 shares of our common stock to the Keens, which were restricted shares.

Equity Compensation Plans

On August 1, 2017, our Board of Directors adopted and approved the 2017 Equity Incentive Plan (the "2017 Equity Plan") in order to attract, motivate, retain, and reward high-quality executives and other employees, officers, directors, consultants, and other persons who provide services to us by enabling such persons to acquire an equity interest in us. Under the 2017 Equity Plan, our Board of Directors (or the compensation committee of the Board of Directors, if one is established) may award stock options, stock appreciation rights ("SARs"), restricted stock awards ("RSAs"), restricted stock unit awards ("RSUs"), shares granted as a bonus or in lieu of another award, and other stock-based performance awards. The 2017 Equity Plan allocates 50,000,000 shares of our common stock ("Plan Shares") for issuance of equity awards under the 2017 Equity Plan. As of December 31, 2018, we have granted, under the 2017 Equity Plan, awards in the form of RSAs for services rendered by independent directors and consultants, non-qualified stock options, RSUs and stock bonus awards.

The information for our 2017 Equity Plan as of December 31, 2018 is summarized as follows:

	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in first column)
Equity compensation plans approved by shareholders	-	-	-
Equity compensation plans not approved by shareholders (1)	11,460,000	\$ 0.106	24,523,026
Total	11,460,000	\$ 0.106	24,523,026

(1) The number of securities remaining available for future issuance include: (i) 9,867,368 shares to be issued upon vesting outstanding RSUs, (ii) 1,680,000 shares to be issued in connection with incentive stock bonuses pursuant to certain employment agreements, subject to approval of the Board of Directors, and (iii) remaining Plan Shares of 12,975,658 which are available for future award under the 2017 Equity Plan.

Refer to Note 16 – *Equity Incentive Plans* of our consolidated financial statements, which are included as part of this Annual Report for the further details on our 2017 Equity Plan.

Item 6. Selected Financial Data

We are a smaller reporting company, as defined by Rule 12b-2 of the Exchange Act, and therefore we are not required to provide the information under this item.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion should be read in conjunction with our financial statements and related notes and other financial information appearing elsewhere in this Annual Report. In addition to historical information, the following discussion and other parts of this Annual Report contain forward-looking information that involves risks and uncertainties. Our actual results could differ materially from those anticipated by such forward-looking information due to the factors discussed under "Risk Factors" and "Forward-Looking Statements and Projections" appearing elsewhere herein.

Non-GAAP Financial Measures

To supplement our financial results on U.S. generally accepted accounting principles ("GAAP") basis, we use the non-GAAP measures including net bookings and backlog, as well as other significant non-cash expenses such as stock-based compensation and certain debt-related expenses. We believe these non-GAAP measures are helpful in understanding our past performance and are intended to aid in evaluating our potential future results. The presentation of these non-GAAP measures should be considered in addition to our GAAP results and are not intended to be considered in isolation or as a substitute for financial information prepared or presented in accordance with GAAP. We believe these non-GAAP financial measures reflect an additional way to view aspects of our operations that, when viewed with our GAAP results, provide a more complete understanding of factors and trends affecting our business.

Overview

Our business and strategic plan for 2019 and 2020 will consist of a series of inter-related initiatives, including: (i) leveraging our strong brand name, (ii) positioning and messaging "Surna as the expert helper" in environmental controls management, (iii) offering a broader product and service array, (iv) evaluating first-generation grow facilities as prospects for broader service and product offerings or retrofit work, (v) rolling out our new sensors, controls and automation ("SCA") product offering, and (vi) developing a corresponding marketing/service/product plan to address facility lifecycle revenue opportunities.

We are also actively identifying and assessing one-off strategic alliances (e.g., joint ventures, co-marketing, distribution) that are low cost/low risk, easy to implement and execute, can leverage our brand recognition in the cannabis space, expand the offerings that our knowledgeable salesforce can present to both past, current and future commercial cannabis cultivators and, most importantly, generate additional revenues and margins.

If these product and service initiatives are successful, we expect that they will bring us a more predictable, steady and recurring revenue stream as compared to our historical one-time engineering/design/equipment projects that, while large in dollar value, were inconsistent and unpredictable and subject to licensing, permitting, funding uncertainties and other factors outside of our control. We believe these new product/service/software/technology offerings will be highly valued by our customers and potentially represent a more highly valued revenue stream to us.

Historically, we have experienced cash flow inconsistency and unpredictability and, as a result, our expense, cash and working capital management have been adversely impacted. In response, we had to access the capital markets to complete a series of equity raises totaling \$5,700,000 to fund our operations during 2017 and 2018. And while we achieved a 33% revenue growth in 2018 (increasing to \$9,600,000 from \$7,200,000 in 2017), our operating loss, net of non-cash equity compensation, increased from \$2,100,000 in 2017 to \$2,800,000 in 2018. So, despite this revenue growth in 2018, the incremental gross profit (at our 2018 gross profit margin of 25.6%) earned on these additional revenues was insufficient to cover our increased operating expenses.

We also experienced bookings and backlog growth in 2018. Our net bookings (as defined below) increased \$4,700,000 from the prior year, increasing from \$9,000,000 in 2017 to \$13,700,000 in 2018, or 52%. Our year-end backlog also increased \$4,000,000 from the prior year-end, increasing from \$4,500,000 at the end of 2017 to \$8,500,000 at the end of 2018. However, during the fourth quarter of 2018, (i) our net bookings were \$1,838,000, a decrease of \$1,490,000, or 45%, compared to the prior quarter, and (ii) our recognized revenue was \$2,195,000, a decrease of \$1,130,000, or 34%, compared to the prior quarter.

Although we had increases in 2018 bookings, backlog and revenue, as evidenced by our fourth quarter 2018 results, we do not consistently convert our backlog into revenue on a quarter-over-quarter basis. Our revenue conversion is largely dependent on customer-centric factors—that are outside of our control—such as industry uncertainty, project financing concerns, and the licensing and qualification of our prospective customers, which makes it difficult for us to predict when we will recognize revenue on our backlog. Further, the increased complexity and size of our new build projects impacts the timing of revenue recognition, with these larger projects typically taking more time to complete. In 2018, the average contract value for our commercial-scale projects was \$408,000 compared to \$332,000 for 2017.

Although bookings or backlog are not the most reliable predictors of revenue that will be recognized over the ensuing 12 months, they offer a leading indication of potential revenue that may be recognized over time. There are risks that we may not realize the full contract value of our backlog in a timely manner, or at all, due to many factors, such as contract cancellation and modification, contract implementation delays and our ability to manage contract performance. Previously, these metrics were featured as key financial highlights reflecting our performance. In the future, bookings and backlog will be reported but deemphasized as we will be focusing on revenue, gross margin and operating results.

The following table sets forth: (i) our beginning backlog (the remaining contract value of outstanding sales contracts for which we have received an initial deposit as of the previous period), (ii) our net bookings for the period (new sales contracts executed during the period for which we received an initial deposit, net of any adjustments including cancellations and change orders during the period), (iii) our recognized revenue for the period, and (iv) our ending backlog for the period (the sum of the beginning backlog and net bookings, less recognized revenue).

	For the quarter ended				
	December 31, 2017	March 31, 2018	June 30, 2018	September 30, 2018	December 31, 2018
Backlog, beginning balance	\$ 4,310,923	\$ 4,456,192	\$ 7,024,110	\$ 8,882,906	\$ 8,885,804
Net bookings, current period	\$ 2,454,269	\$ 4,622,646	\$ 3,866,541	\$ 3,327,518	\$ 1,838,210
Recognized revenue, current period	\$ 2,309,000	\$ 2,054,728	\$ 2,007,745	\$ 3,324,620	\$ 2,194,875
Backlog, ending balance	\$ 4,456,192	\$ 7,024,110	\$ 8,882,906	\$ 8,885,804	\$ 8,529,139

The completion of a customer's cultivation facility project is dependent upon the customer's ability to secure funding and real estate, obtain a license and then build their cultivation facility so they can take possession of the equipment. Accordingly, the time it takes for customers to complete a project, which corresponds to when we are able to recognize revenue, is driven by numerous factors including: (i) the large number of first-time participants interested in the indoor cannabis cultivation business; (ii) the complexities and uncertainties involved in obtaining state and local licensure and permitting; (iii) local and state government delays in approving licenses and permits due to lack of staff or the large number of pending applications, especially in states where there is no cap on the number of cultivators; (iv) the customer's need to obtain cultivation facility financing; (v) the time needed, and coordination required, for our customers to acquire real estate and properly design and build the facility (to the stage when climate control systems can be installed); (vi) the large price tag and technical complexities of the climate control and air sanitation system; (vii) the availability of power; and (viii) delays that are typical in completing any construction project.

There is significant uncertainty regarding the timing of revenue recognition of our backlog as of December 31, 2018. As of December 31, 2018, 82% of our backlog was attributable to customer contracts for which we have only received an initial advance payment to cover our engineering services ("engineering only paid contracts") and, as a result, there are enhanced risks that the equipment portion of these contracts will not be completed or will be delayed, which could occur if the customer is dissatisfied with the quality or timeliness of our engineering services, there is a delay or abandonment of the project due to the customer's inability to obtain project financing or licensing, or the customer determines not to proceed with the project due to economic factors, such as declining cannabis wholesale prices in the state. In contrast, after the customer has made an advance payment for a portion of the equipment to be delivered under the contract ("partial equipment paid contracts"), we typically are better able to estimate the timing of revenue recognition since the risks and delays associated with licensing, permitting and project funding are typically mitigated once the initial equipment payment is received.

We have provided an estimate in our consolidated financial statements for when we expect to recognize revenue on our remaining performance obligations (i.e., our 2018 year-end backlog), using separate time bands, with respect to engineering only paid contracts and partial equipment paid contracts. We estimate that we will recognize approximately 62% of our 2018 year-end backlog during 2019. However, approximately 31% of our backlog is not expected to be recognized over the next 24 months, and may never be recognized. The largest portion of this backlog involves a large, multi-state customer that has put on hold two projects in states where the current market conditions, including wholesale cannabis prices, are not favorable. Refer to the *Revenue Recognition* section of Note 2 in our consolidated financial statements, included as part of this Annual Report for additional information on our estimate of future revenue recognition on our remaining performance obligations.

Our backlog, remaining performance obligations and net bookings may not be indicative of future operating results, and our customers may attempt to renegotiate or terminate their contracts for a number of reasons, including delays in or inability to obtain project financing or licensing or abandonment of the project entirely. Accordingly, there can be no assurance that contracts included in backlog or remaining performance obligations will actually generate revenues or when the actual revenues will be generated. Net bookings and backlog are considered non-GAAP financial measures, and therefore, they should be considered in addition to, rather than as a substitute for, our GAAP measures for recognized revenue, deferred revenue and remaining performance obligations. Further, we can provide no assurance as to the profitability of our contracts reflected in remaining performance obligations, backlog and net bookings. As part of our new business plan and strategy, going forward, we will seek to: (i) reduce our reliance on new build facility projects which generate inconsistent revenue and cash flow, (ii) establish revenue from "lifecycle" operational and facility management offerings, (iii) operate with a more disciplined expense, cash and working capital management, (iv) become financially self-sustaining by attempting to achieve cash flow breakeven and operating profit, and (v) raise capital for strategic initiatives when the return on investment is quantifiable and justified.

Our working capital position is inadequate and, as with many emerging growth companies in the cannabis and other industries, we will likely need to raise capital in order to execute on our strategic initiatives, improve our working capital situation and drive our growth. While we understand new equity capital raises are inherently dilutive at the time of issuance, it is important that our shareholders know that management has taken several steps beginning in the fourth quarter of 2018 to preserve our cash resources to the best of our ability. Below are some steps we have taken to date:

- We believe the core business is sustainable with our targeted margin. However, the nature of our current business is to do large projects, and the average size of these projects has risen over time, sometimes exceeding \$1,000,000 per project. Unfortunately, when a project is delayed, as frequently happens for reasons outside of our control, our cash flow is adversely impacted. Our senior management team is focused on generating sales and moving our existing projects to completion. Our new strategy will include a focus on more steady and predictable revenue opportunities.
- We have made reductions in payroll costs and other personnel-related expenses to reduce our cash burn rate. These cuts represent nearly a 30% reduction in our annualized payroll-related costs, or \$900,000 annualized savings.
- Another factor contributing to the current strained cash position was a change in some of the manufacturing partners we have for our proprietary products as part of our push to upgrade the performance and efficiency of our product line. As we continue our new product initiatives, we are likely to have more products that will require advance payments and/or require us to stock inventory. We have done our best to manage around this, but the reality is our working capital requirements have increased as a result.

We believe that we have reduced our cash burn rate to the lowest level possible and therefore the only way to improve our cash flow and working capital position is to add revenue and margin to “grow out” of our current situation. While we have identified many opportunities as part of our new business plan and strategy, there is significant work ahead in order for us to execute on them and realize our new vision. There is no assurance that we will be successful in achieving our new business plan and strategy, and we will need additional capital resources in order to do so.

We are committed to implementing a full investor relations program and to fully engage with the investment community on an ongoing basis. As part of this program, we intend to articulate a series of specific metrics for 2019 and 2020.

Results of Operations

Comparison of Years ended December 31, 2018 and 2017

Revenues and Cost of Goods Sold

Revenue for the year ended December 31, 2018 was \$9,582,000 compared to \$7,210,000 for the year ended December 31, 2017, an increase of \$2,372,000, or 33%. This revenue increase was partly the result of our increased net bookings in 2018, which grew from \$9,000,000 in 2017 to \$13,700,000 in 2018, or 51%. However, despite our increases in 2018 bookings and revenue, we remain unable to consistently convert our backlog into revenue on a quarter-over-quarter basis. Our revenue conversion is largely dependent on customer-centric factors – outside of our control – such as industry uncertainty, project financing concerns, and the licensing and qualification of our prospective customers, which makes it difficult for us to predict when we will recognize revenue on our backlog.

Cost of revenue increased by \$1,832,000 from \$5,300,000 for the year ended December 31, 2017 to \$7,132,000 for the year ended December 31, 2018.

The gross profit for the year ended December 31, 2018 was \$2,450,000 compared to \$1,910,000 for the year ended December 31, 2017. Gross profit margin decreased by approximately one percentage point from 26.5% for the year ended December 31, 2017 to 25.6% for the year ended December 31, 2018. This decrease was due primarily to higher project management costs which were partially offset by increased margin on our engineering services.

Our revenue cost structure is comprised of both fixed and variable components. The fixed cost component represents engineering, manufacturing and project management salaries and benefits and manufacturing overhead that totaled \$1,666,000, or 17.4% of total revenue, for the year ended December 31, 2018 as compared to \$1,205,000, or 16.7% of total revenue, for the year ended December 31, 2017. The increase of \$461,000 was primarily due to an increase in salaries and benefits of \$412,000 and stock-based compensation of \$25,000. The variable cost component, which represents our cost of equipment, outside engineering costs, shipping and handling, travel and warranty costs, totaled \$5,466,000, or 57.0% of total revenue, in the year ended December 31, 2018 as compared to \$4,095,000, or 56.8% of total revenue, in the year ended December 31, 2017. In the year ended December 31, 2018 as compared to the prior year: (i) our travel costs increased by \$76,000, (ii) our warranty costs increased by \$29,000, which were offset by (iii) a reduction in charges for excess and obsolete inventory allowances of \$278,000.

Operating Expenses

Operating expenses increased by 18% from \$6,152,000 for the year ended December 31, 2017 to \$7,270,000 for the year ended December 31, 2018, an increase of \$1,118,000. The operating expense increase consisted primarily of: (i) an increase in selling, general and administrative expenses ("SG&A expenses") of \$766,000, and (ii) an increase in advertising and marketing expenses of \$354,000.

The increase in SG&A expenses for the year ended December 31, 2018 compared to the year ended December 31, 2017, was due primarily to: (i) an increase of \$300,000 in salaries and benefits, (ii) an increase of \$202,000 in stock-based compensation, (iii) an increase in consulting fees of \$368,000, of which \$260,000 was related to stock-based consulting fees, (iv) an increase of \$132,000 in accounting fees, (v) an increase of \$129,000 in bad debt expense, (vi) an increase of \$119,000 in depreciation offset by (vii) a decrease of \$187,000 in legal fees, and (viii) a decrease of \$576,000 in stock-based compensation to our independent directors.

The increase in marketing expenses were due primarily to: (i) an increase of \$320,000 for industry trade shows and events, (ii) an increase in advertising and marketing of \$83,000 offset by (iii) a decrease of \$105,000 for web development and collateral materials.

Operating Loss

We had an operating loss of \$4,820,000 for the year ended December 31, 2018, as compared to an operating loss of \$4,242,000 for the year ended December 31, 2017, an increase of \$578,000. The operating loss included \$2,017,000 of non-cash, stock-based compensation expenses in the year ended December 31, 2018 as compared to \$2,140,000 for the year ended December 31, 2017. Excluding these non-cash items, our operating loss increased by \$701,000.

Other Income (Expense)

Our other expenses (net) decreased by \$754,000 from an expense of \$677,000 for the year ended December 31, 2017 to income of \$77,000 for the year ended December 31, 2018. This decrease is primarily related to the loss on extinguishment of debt of \$643,000 related to the conversion of certain notes during 2017.

Net Loss

Overall, we had a net loss of \$4,744,000 for the year ended December 31, 2018 as compared to a net loss of \$4,919,000 for the year ended December 31, 2017, a decrease of \$175,000. The net loss included \$2,017,000 of non-cash, stock-based compensation costs and non-cash debt-related gains of \$21,000 in the year ended December 31, 2018 as compared to non-cash, stock-based compensation expense of \$2,140,000 and non-cash debt-related costs of \$681,000 in the year ended December 31, 2017. Excluding these non-cash items, our net loss increased by \$650,000.

Comparison of Years ended December 31, 2017 and 2016

Revenues and Cost of Goods Sold

Revenue for the year ended December 31, 2017 was \$7,210,000 compared to \$7,580,000 for the year ended December 31, 2016, a decrease of \$370,000, or 5%. Although our net bookings trended favorably and our backlog grew during 2017, revenue recognition continues to be impacted by our long and uncertain sales cycle and delays faced by our customers in the construction of new cultivation facilities. Further, while additional states have approved some form of cannabis use and cultivation, either for medical or recreational use, the legislation will not result in immediate new construction activity as states need time to issue implementing rules and regulations for the licensing and sales activity and local authorities need to issue building permits.

Cost of revenue increased by \$24,000 from \$5,276,000 for the year ended December 31, 2016 to \$5,300,000 for the year ended December 31, 2017.

The gross profit for the year ended December 31, 2017 was \$1,910,000 compared to \$2,304,000 for the year ended December 31, 2016. Gross profit margin decreased by four percentage points from 30% for the year ended December 31, 2016 to 26% for the year ended December 31, 2017. This decrease was due primarily to lower margin on our engineering services and an increase in shipping and handling costs in year ended December 31, 2017 compared to the year ended December 31, 2016.

Our revenue cost structure is comprised of both fixed and variable components. The fixed cost component represents engineering, manufacturing and project management salaries and benefits and manufacturing overhead that totaled \$1,205,000, or 17% of total revenue, for the year ended December 31, 2017 as compared to \$1,049,000, or 14% of total revenue, for the year ended December 31, 2016. The increase of \$156,000 was primarily due to an increase in salaries and benefits of \$56,000 and stock-based compensation of \$75,000. The variable cost component, which represents our cost of equipment, outside engineering costs, shipping and handling, travel and warranty costs, totaled \$4,095,000, or 57% of total revenue, in the year ended December 31, 2017 as compared to \$4,227,000, or 56% of total revenue, in the year ended December 31, 2016. In the year ended December 31, 2017 as compared to the prior year: (i) our shipping and handling costs increased by \$108,000, (ii) our charges for obsolete inventory allowances increased by \$229,000 due to specifically-built inventory which our customer refused delivery, which were offset by (iii) a reduction in warranty costs of \$682,000, which was primarily related to \$533,000 in costs we incurred in 2016 to replace a customer's system due to faulty installation by a third-party.

Operating Expenses

Operating expenses increased by 117% from \$2,837,000 for the year ended December 31, 2016 to \$6,152,000 for the year ended December 31, 2017, an increase of \$3,315,000. The operating expense increase consisted of: (i) an increase in SG&A expenses of \$3,008,000, and (ii) an increase in advertising and marketing expenses of \$336,000, offset by (iii) a decrease in product development expense of \$29,000.

The increase in SG&A expenses for the year ended December 31, 2017 compared to the year ended December 31, 2016, was due primarily to: (i) an increase of \$1,345,000 in stock-related compensation paid to employees and consultants, (ii) an increase of \$614,000 in salaries and benefits, (iii) an increase of \$204,000 in legal and consulting fees, (iv) an increase in sales travel of \$134,000 and (v) an increase of \$785,000 in cash and stock-related compensation paid to our independent directors.

The increase in marketing expenses were primarily for: (i) our investment in re-branding the Surna name and logo, including approximately \$160,000 to revise and update our website and marketing materials, (ii) our increased presence at industry trade shows and events resulting in increased expenses of \$49,000, and (iii) marketing salaries and benefits (including stock related-compensation) which increased by approximately \$58,000.

Operating Loss

We had an operating loss of \$4,242,000 for the year ended December 31, 2017, as compared to an operating loss of \$533,000 for the year ended December 31, 2016, an increase of \$3,709,000. The operating loss included \$2,140,000 of non-cash, stock-based compensation expenses in the year ended December 31, 2017 as compared to \$4,000 for the year ended December 31, 2016. Excluding these non-cash items, our operating loss increased by \$1,573,000.

Other Income (Expense)

Our other expenses (net) decreased by 75% from \$2,740,000 for the year ended December 31, 2016 to \$677,000 for the year ended December 31, 2017. This decrease is primarily related to the decrease in the amortization of debt discount and interest expense on convertible promissory notes. The convertible promissory notes converted in the fourth quarter of 2016 and the first quarter of 2017. We did incur a loss on extinguishment of debt of \$643,000 and \$338,000 for the years ended in December 31, 2017 and 2016, respectively, due to the conversion of certain notes.

Net Loss

Overall, we had a net loss of \$4,919,000 for the year ended December 31, 2017 as compared to a net loss of \$3,273,000 for the year ended December 31, 2016, an increase of \$1,646,000. The net loss included \$2,140,000 of non-cash, stock-based compensation expenses and \$681,000 of debt-related costs in the year ended December 31, 2017 as compared to non-cash, stock-based compensation expense of \$4,000 and debt-related costs of \$2,780,000 in the year ended December 31, 2016. Excluding these non-cash items, our net loss increased by \$1,609,000.

Financial Condition, Liquidity and Capital Resources

Cash and Cash Equivalents

As of December 31, 2018, we had cash and cash equivalents of \$253,000, compared to cash and cash equivalents of \$2,468,000 as of December 31, 2017. The \$2,215,000 decrease in cash and cash equivalents during the year ended December 31, 2018 was primarily the result of: (i) our net loss of \$4,744,000 adjusted for non-cash items of \$2,177,000, (ii) cash used of \$282,000 for changes in our working capital, (iii) cash used in our investing activities of \$182,000, (iv) cash used to repurchase shares of our common stock of \$400,000, offset by (iv) aggregate proceeds of \$1,210,000 raised from the sale of investment units in a private placement offering to accredited investors.

Our cash is held in bank depository accounts in certain financial institutions. We have from time to time deposits in financial institutions that exceed the federally insured amount.

As of December 31, 2018, we had accounts receivable (net of allowance for doubtful accounts) of \$210,000, inventory (net of excess and obsolete allowance) of \$936,000, and prepaid expenses of \$128,000. As of December 31, 2018, we had no indebtedness, total accounts payable and accrued expenses of \$1,809,000, and deferred revenue of \$642,000. As of December 31, 2018, we had a working capital deficit of \$923,000, compared to a working capital surplus of \$308,000 as of December 31, 2017.

Our accounts receivable from three customers made up 17%, 12% and 11%, respectively, of the total balance as of December 31, 2018.

We have never declared or paid any cash dividends on our common stock. We currently intend to retain all available funds and any future earnings for use in the operation and expansion of our business and do not anticipate paying any cash dividends in the foreseeable future.

Summary of Cash Flows

The following summarizes our cash flows for the years ended December 31, 2018 and 2017:

	For the Year Ended December 31,	
	2018	2017
Net cash used in operating activities	\$ (2,849,000)	\$ (2,267,000)
Net cash used in investing activities	(182,000)	(205,000)
Net cash provided by financing activities	816,000	4,621,000
Net (decrease) increase in cash	<u>\$ (2,215,000)</u>	<u>\$ 2,149,000</u>

Operating Activities

We have never reported net income. We incurred a net loss for the year ended December 31, 2018 of \$4,744,000 and have an accumulated deficit of \$24,346,000 as of December 31, 2018.

Cash used in operations for the year ended December 31, 2018 was \$2,849,000 compared to cash used in operations of \$2,267,000 for the year ended December 31, 2017, an increase of \$582,000. The additional cash usage is primarily attributable to: (i) a reduction in non-cash charges of \$965,000, which was offset by (ii) a decrease in cash used for working capital of \$208,000, and (iii) a decrease in net loss of \$175,000. During the year ended December 31, 2018, significant non-cash items included: (i) stock-related compensation of \$2,029,000, and (ii) depreciation and amortization expense of \$164,000.

Investing Activities

Cash used in investing activities for the year ended December 31, 2018 was approximately \$182,000 compared to cash used in investing activities of \$205,000 for the year ended December 31, 2017. During the year ended December 31, 2018, we received payments for tenant improvement allowances of \$100,000, offset by payments for fixed assets, intangibles assets and certain equipment to be held for lease to a related party of \$282,000.

Financing Activities

Cash provided by financing activities for the year ended December 31, 2018 was \$816,000 compared to cash provided by financing activities of \$4,621,000 for the year ended December 31, 2017. During the year ended December 31, 2018, we completed one private placement consisting of the sale of shares of our common stock, with attached warrants, resulting in aggregate proceeds of \$1,210,000. During the year ended December 31, 2018, we also repurchased shares of our common stock from a related party for \$400,000.

Going Concern

Our consolidated financial statements have been presented on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. Our independent registered public accounting firm included in its audit opinion on our financial statements for the year ended December 31, 2018 a statement that there is substantial doubt as to our ability to continue as a going concern. The financial statements have been prepared assuming that we will continue as a going concern. We have determined that our ability to continue as a going concern is dependent on raising additional capital to fund our operations and ultimately on generating future profitable operations. There can be no assurance that we will be able to raise sufficient additional capital or eventually have positive cash flow from operations to address all of our cash flow needs. If we are not able to find alternative sources of cash or generate positive cash flow from operations, our business and shareholders will be materially and adversely affected. The foregoing factors raise substantial doubt about our ability to continue as a going concern for a period of one year from the date our financial statements are issued. Our consolidated financial statements do not include any adjustment that might result from the outcome of this uncertainty.

Capital Raising

We believe our cash balances and cash flow from operations will be insufficient to fund our operations for the next 12 months. If we are unable to substantially increase revenues, reduce expenditures, or otherwise generate cash flows for operations, then we will need to raise additional funding to continue as a going concern.

If results of operations for 2019 do not meet management's expectations, or additional capital is not available, management believes it has the ability to reduce certain expenditures. The precise amount and timing of the funding needs cannot be determined accurately at this time, and will depend on a number of factors, including the market demand for our products and services, the quality of product development efforts, management of working capital, and continuation of normal payment terms and conditions for purchase of our products and services.

Based on management's estimate for our operational cash requirements, we will need to raise debt and/or equity financing sometime in 2019 in order to continue our operations and achieve our growth targets. There can be no assurance that we will be able to raise debt or equity financing in sufficient amounts, when and if needed, on acceptable terms or at all.

If we are unable to generate sufficient cash flow from operations, make adjustments to our payment arrangements or raise sufficient additional capital through future debt and equity financings or strategic and collaborative ventures with potential partners, we will likely have to reduce the size and scope of our operations. Our officers and shareholders have not made any written or oral agreement to provide us additional financing. There can be no assurance that we will be able to continue to raise capital on terms and conditions that are deemed acceptable to us, or at all.

Inflation

In the opinion of management, inflation has not and will not have a material effect on our operations in the immediate future. Management will continue to monitor inflation and evaluate the possible future effects of inflation on our business and operations.

Contractual Payment Obligations

As of December 31, 2018, our contractual payment obligations consisted of a building lease. On June 27, 2017, we executed a lease, to be effective September 29, 2017, for our manufacturing and office space. The term of the lease commenced September 29, 2017 and continues through August 31, 2022. Beginning September 1 each year during the term, the monthly rent will increase by 3%.

As of December 31, 2018, our contractual obligations under our building lease were as follows:

Contractual Obligations	Less than 1				More than 5
	Total	Year	1 - 3 Year	3 - 5 Years	Years
Operating lease obligations	\$ 903,203	\$ 236,926	\$ 495,389	\$ 170,888	\$ -

Commitments and Contingencies

Litigation

There are 6,750,000 restricted stock units that have not been settled due to the failure of the recipient to pay the required withholding taxes based on the value of the underlying shares at the time of vesting. We have commenced litigation against the recipient to have these restricted stock units canceled.

From time to time, in the normal course of our operations, we are subject to litigation matters and claims. Litigation can be expensive and disruptive to normal business operations. Moreover, the results of complex legal proceedings are difficult to predict and our view of these matters may change in the future as the litigation and events related thereto unfold. An unfavorable outcome to any legal matter, if material, could have an adverse effect on our operations or our financial position, liquidity or results of operations.

Other Commitments

In the ordinary course of business, we may provide indemnifications of varying scope and terms to customers, vendors, lessors, business partners, and other parties with respect to certain matters, including, but not limited to, losses arising out of our breach of such agreements, services to be provided by us, or from intellectual property infringement claims made by third parties. In addition, we have entered into indemnification agreements with our directors and certain of our officers and employees that will require us to, among other things, indemnify them against certain liabilities that may arise by reason of their status or service as directors, officers, or employees. We maintain director and officer insurance, which may cover certain liabilities arising from our obligation to indemnify our directors and certain of our officers and employees, and former officers, directors, and employees of acquired companies, in certain circumstances.

Off-Balance Sheet Arrangements

We are required to disclose any off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures, or capital resources that are material to investors. As of December 31, 2018, we had no off-balance sheet arrangements. During 2018 and 2017, we did not engage in any off-balance sheet financing activities other than those included in the "Contractual Payment Obligations" discussed above and those reflected in Note 12 of our consolidated financial statements.

Recent Developments

Refer to Note 18 - *Subsequent Events* of our consolidated financial statements, included as part of this Annual Report, for the more significant events occurring since December 31, 2018.

Critical Accounting Policies and Estimates

This discussion and analysis of our financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in conformity with accounting principles generally accepted in the United States of America. Certain accounting policies are particularly important to the understanding of our financial position and results of operations and require the application of significant judgment by our management or can be materially affected by changes from period to period in economic factors or conditions that are outside of our control. As a result, they are subject to an inherent degree of uncertainty. In applying these policies, management uses their judgment to determine the appropriate assumptions to be used in the determination of certain estimates. Those estimates are based on our historical operations, our future business plans and projected financial results, the terms of existing contracts, observance of trends in the industry, information provided by our customers, and information available from other outside sources, as appropriate. Actual results could materially differ from those estimates. For information regarding our critical accounting policies as well as recent accounting pronouncements, see Note 2 of our consolidated financial statements.

Our management has discussed the development and selection of critical accounting estimates with the Audit Committee of the Board of Directors and the Audit Committee has reviewed our disclosure relating to critical accounting estimates in this Annual Report. We believe the following are the more significant judgments and estimates used in the preparation of our consolidated financial statements.

Allowance for accounts receivable. Accounts receivables are recorded at the invoiced amount, or based on revenue earned for items not yet invoiced, and generally do not bear interest. An allowance for doubtful accounts is established, as necessary, based on past experience and other factors, which, in management's judgment, deserve current recognition in estimating bad debts. Based on its review, we establish or adjust the allowance for specific customers and the accounts receivable portfolio as a whole. As of December 31, 2018 and 2017, the allowance for doubtful accounts was \$119,022 and \$105,267, respectively. If the financial condition of our customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required.

Excess and obsolete inventory. Inventory is stated at the lower of cost or net realizable value. The inventory is valued based on a first-in, first-out ("FIFO") basis. Lower of cost or net realizable value is evaluated by considering obsolescence, excessive levels of inventory, deterioration and other factors. Adjustments to reduce the cost of inventory to its net realizable value, if required, are made for estimated excess, obsolescence or impaired inventory. Excess and obsolete inventory is charged to cost of revenue and a new lower-cost basis for that inventory is established and subsequent changes in facts and circumstances do not result in the restoration or increase in that newly established cost basis. As of December 31, 2018 and 2017, the allowance for excess and obsolete inventory was \$295,347 and \$323,384, respectively.

Goodwill impairment. Goodwill, defined as unidentified asset(s) acquired in conjunction with a business acquisition, is tested for impairment on an annual basis and between annual tests whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. We recorded goodwill in connection with our acquisition of Hydro in July 2014. We perform a quantitative impairment test annually during the fourth quarter by comparing the fair value of the reporting unit with its carrying amount, including goodwill. If the fair value of the reporting unit exceeds its carrying amount, goodwill is considered not impaired. An impairment charge would be recognized for the amount by which the carrying amount exceeds the reporting unit's fair value. We completed this assessment as of December 31, 2018, and concluded that no impairment existed.

Product warranty. We warrant the products that we manufacture for a warranty period equal to the lesser of 12 months from start-up or 18 months from shipment. Our warranty provides for the repair, rework, or replacement of products (at our option) that fail to perform within stated specification. Our third-party suppliers also warrant their products under similar terms, which are passed-through to our customers. We assess the historical warranty claims on our manufactured products and, since 2016, warranty claims have been approximately 1% of annual revenue generated on these products. We continue to assess the need to record a warranty reserve at the time of sale based on historical claims and other factors. As of December 31, 2018 and 2017, we had an accrued warranty reserve amount of \$144,822 and \$105,122, respectively, which are included in accounts payable and accrued liabilities on our consolidated balance sheets.

Income taxes. We account for deferred tax liabilities and assets for the future consequences of events that have been recognized in our consolidated financial statements or tax returns. Measurement of the deferred items is based on enacted tax laws. In the event the future consequences of differences between financial reporting bases and tax bases of our assets and liabilities result in a deferred tax asset, we perform an evaluation of the probability of being able to realize the future benefits indicated by such asset. A valuation allowance related to a net deferred tax asset is recorded when it is more likely than not that some portion or all of the net deferred tax asset will not be realized. Management's judgment is required in determining our provision for income taxes, deferred tax assets and liabilities, and any valuation allowance recorded against the net deferred tax assets. We recorded a full valuation allowance as of December 31, 2018 and 2017. Based on the available evidence, we believe it is more likely than not that we will not be able to utilize our net deferred tax assets in the foreseeable future. We intend to maintain valuation allowances until sufficient evidence exists to support the reversal of such valuation allowances. We make estimates and judgments about our future taxable income that are based on assumptions that are consistent with our plans. Should the actual amounts differ from our estimates, the carrying value of our deferred tax assets could be materially impacted.

Share-based compensation. We recognize the cost resulting from all share-based compensation arrangements, including stock options, restricted stock awards and restricted stock units that we grant under our equity incentive plan in our consolidated financial statements based on their grant date fair value. The expense is recognized over the requisite service period or performance period of the award. Awards with a graded vesting period based on service are expensed on a straight-line basis for the entire award. Awards with performance-based vesting conditions which require the achievement of a specific company financial performance goal at the end of the performance period and required service period are recognized over the performance period. Each reporting period, we reassess the probability of achieving the respective performance goal. If the goals are not expected to be met, no compensation cost is recognized and any previously recognized amount recorded is reversed. If the award contains market-based vesting conditions, the compensation cost is based on the grant date fair value and expected achievement of market condition and is not subsequently reversed if it is later determined that the condition is not likely to be met or is expected to be lower than initially expected. The grant date fair value of stock options is based on the Black-Scholes Model. The Black-Scholes Model requires judgmental assumptions including volatility and expected term, both based on historical experience. The risk-free interest rate is based on U.S. Treasury interest rates whose term is consistent with the expected term of the option.

Allocation of transaction price; standalone selling price. A contract's transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. When there are multiple performance obligations within a contract, we allocate the transaction price to each performance obligation based on standalone selling price. We determine the standalone selling price for each of the performance obligations at the inception of the contract and do not adjust the initial allocation for future changes in any selling prices. When estimating the selling price, we use various observable inputs. The best observable input is our actual selling price for the same good or service, however, this input is generally not available for our contracts containing multiple performance obligations. For engineering services, we estimate the standalone selling price by reference to certain physical characteristics of the project, such as facility size and mechanical systems involved, which are indicative of the scope and complexity of the mechanical engineering services to be provided. For equipment sales, the standalone selling price is determined by forecasting the expected costs of the equipment and then adding an appropriate margin, based on a range of acceptable margins established by management. Depending on the nature of the performance obligations, we may use a combination of different methods and observable inputs if certain performance obligations have highly variable or uncertain standalone selling prices. Once the selling prices are determined, we apply the relative values to the total contract consideration and estimates the amount of the transaction price to be recognized as each promise is fulfilled.

Remaining performance obligations. The new revenue standard requires certain quantitative and qualitative disclosures about our remaining performance obligations, which are defined as performance obligations that are unsatisfied (or partially unsatisfied) as of the end of the reporting period, including (i) the aggregate amount of the transaction price allocated to the remaining performance obligations, and (ii) when we expect to recognize as revenue with respect to such amounts on either: (x) a quantitative basis using appropriate time bands for the duration of the remaining performance obligations, or (y) by using qualitative information. Industry uncertainty, project financing concerns, and the licensing and qualification of our prospective customers, which are out of our control, make it difficult for us to predict when we will recognize revenue on our remaining performance obligations. There are risks that we may not realize the full contract value on customer projects in a timely manner or at all, and completion of a customer's cultivation facility project is dependent upon the customer's ability to secure funding and real estate, obtain a license and then build their cultivation facility so they can take possession of the equipment. Accordingly, the time it takes for customers to complete a project, which corresponds to when we are able to recognize revenue, is driven by numerous factors including: (i) the large number of first-time participants interested in the indoor cannabis cultivation business; (ii) the complexities and uncertainties involved in obtaining state and local licensure and permitting; (iii) local and state government delays in approving licenses and permits due to lack of staff or the large number of pending applications, especially in states where there is no cap on the number of cultivators; (iv) the customer's need to obtain cultivation facility financing; (v) the time needed, and coordination required, for our customers to acquire real estate and properly design and build the facility (to the stage when climate control systems can be installed); (vi) the large price tag and technical complexities of the climate control and air sanitation system; (vii) the availability of power; and (viii) delays that are typical in completing any construction project.

There is significant uncertainty regarding the timing of our recognition on all remaining performance obligations as of December 31, 2018. Customer contracts for which we have only received an initial advance payment to cover the allocated value of our engineering services ("engineering only paid contracts") carry enhanced risks that the equipment portion of these contracts will not be completed or will be delayed, which could occur if the customer is dissatisfied with the quality or timeliness of our engineering services or there is a delay or abandonment of the project due to the customer's inability to obtain project financing or licensing. In contrast, after the customer has made an advance payment for a portion of the equipment to be delivered under the contract ("partial equipment paid contracts"), we are typically better able to estimate the timing of revenue recognition since the risks and delays associated with licensing, permitting and project funding are typically mitigated once the initial equipment payment is received.

Commitments and contingencies. In the normal course of business, we are subject to loss contingencies, such as legal proceedings and claims arising out of our business, that cover a wide range of matters, including, among others, customer disputes, government investigations and tax matters. An accrual for a loss contingency is recognized when it is probable that an asset had been impaired or a liability had been incurred and the amount of loss can be reasonably estimated.

Refer to Note 2 of our consolidated financial statements, included as part of this Annual Report, where our accounting policies are more fully described.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are a smaller reporting company, as defined by Rule 12b-2 of the Exchange Act, therefore are not required to provide the information under this item.

Item 8. Financial Statements and Supplementary Data

Our consolidated financial statements are included herein, beginning on page F-1. The information required by this item is incorporated herein by reference to the consolidated financial statements set forth in Item 15. "Exhibits and Financial Statement Schedules" of this Annual Report.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management conducted an evaluation, with the participation of our Chief Executive Officer and our Principal Financial and Accounting Officer, which positions are currently held by the same person, of the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this Annual Report on Form 10-K. Based upon that evaluation, our Chief Executive Officer and our Principal Financial and Accounting Officer concluded that as a result of the material weakness in our internal control over financial reporting described below, our disclosure controls and procedures were not effective as of December 31, 2018.

Management's Annual Report on Internal Control over Financial Reporting

Management is responsible for the preparation of our financial statements and related information. Management uses its best judgment to ensure that the financial statements present fairly, in material respects, our financial position and results of operations in conformity with generally accepted accounting principles.

Management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in the Exchange Act. These internal controls are designed to provide reasonable assurance that the reported financial information is presented fairly, that disclosures are adequate and that the judgments inherent in the preparation of financial statements are reasonable. There are inherent limitations in the effectiveness of any system of internal controls including the possibility of human error and overriding of controls. Consequently, an effective internal control system can only provide reasonable, not absolute, assurance with respect to reporting financial information.

Our internal control over financial reporting includes policies and procedures that: (i) pertain to maintaining records that, in reasonable detail, accurately and fairly reflect our transactions; (ii) provide reasonable assurance that transactions are recorded as necessary for preparation of our financial statements in accordance with generally accepted accounting principles and that the receipts and expenditures of company assets are made in accordance with our management and directors authorization; and (iii) provide reasonable assurance regarding the prevention of or timely detection of unauthorized acquisition, use or disposition of assets that could have a material effect on our financial statements.

Under the supervision of management, by our Chief Executive Officer and our Principal Financial and Accounting Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") published in 2013 and subsequent guidance prepared by COSO specifically for smaller public companies. Based on that evaluation, our management concluded that our internal control over financial reporting was not effective as of December 31, 2018 for the reasons discussed below.

A material weakness is a deficiency or a combination of deficiencies in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of the annual or interim consolidated financial statements will not be prevented or detected on a timely basis.

Management identified the following material weakness in its assessment of the effectiveness of internal control over financial reporting as of December 31, 2018:

The Company did not maintain effective controls over certain aspects of the financial reporting process because: (i) we lack a sufficient complement of personnel with a level of accounting expertise and an adequate supervisory review structure that is commensurate with our financial reporting requirements, (ii) there is inadequate segregation of duties due to the limitation on the number of our accounting personnel, and (iii) we have insufficient controls and processes in place to adequately verify the accuracy and completeness of spreadsheets that we use for a variety of purposes including revenue, taxes, stock-based compensation and other areas, and place significant reliance on, for our financial reporting.

We intend to take appropriate and reasonable steps to make the necessary improvements to remediate these deficiencies. We are committed to continuing to improve our financial organization including, without limitation, expanding our accounting staff and improving our systems and controls to reduce our reliance on the manual nature of our existing systems. However, due to our size and our financial resources, remediating the several identified weaknesses has not always been possible and may not be economically feasible now or in the future.

Our management, including our Chief Executive Officer and our Principal Financial and Accounting Officer, does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent all error and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints and the benefits of controls must be considered relative to their costs. Due to the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within our Company have been detected.

The material weaknesses in internal control over financial reporting as of December 31, 2018, remained unchanged from December 31, 2017. Management believes that the material weaknesses set forth above did not have an effect on our financial reporting for the year ended December 31, 2018.

We will continue to monitor and evaluate the effectiveness of our internal control over financial reporting on an ongoing basis and are committed to taking further action and implementing additional enhancements or improvements, as necessary and as funds allow. We do not, however, expect that the material weaknesses in our disclosure controls will be remediated until such time as we have improved our internal control over financial reporting.

This Annual Report on Form 10-K does not include an attestation report of our registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by our registered public accounting firm pursuant to rules of the SEC that permit us to provide only management's report in this Annual Report on Form 10-K.

Changes in Internal Control over Financial Reporting

There were no changes identified in connection with our internal control over financial reporting during the quarter ended December 31, 2018, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

PART III

We will file a definitive Proxy Statement for our 2019 Annual Meeting of Stockholders with the SEC, pursuant to Regulation 14A, not later than 120 days after the end of our fiscal year. Accordingly, certain information required by Part III has been omitted under General Instruction G(3) to Form 10-K. Only those sections of our definitive Proxy Statement that specifically address the items set forth herein are incorporated by reference.

Item 10. Directors, Executive Officers and Corporate Governance

Information in response to this Item is incorporated in this Annual Report by reference to the information provided in our definitive Proxy Statement for our 2019 Annual Meeting of Stockholders (the "2019 Proxy Statement") to be filed with the SEC pursuant to Regulation 14A under the Exchange Act.

We have adopted a code of business conduct and ethics that applies to our directors, officers and employees. The code of business conduct and ethics is available on our website at www.surna.com. We will report any amendments to or waivers of a required provision of the code of business conduct and ethics on our website or in a Form 8-K.

Item 11. Executive Compensation

The information with respect to compensation of our executives and directors will be contained in the 2019 Proxy Statement to be filed with the SEC and is incorporated in this Annual Report by reference in response to this item.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information with respect to security ownership of certain beneficial owners and management will be contained in the 2019 Proxy Statement to be filed with the SEC and is incorporated in this Annual Report by reference in response to this item.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information with respect to certain relationships and related transactions will be contained in the 2019 Proxy Statement to be filed with the SEC and is incorporated in this Annual Report by reference in response to this item.

Item 14. Principal Accountant Fees and Services

The information with respect to principal accountant fees and services will be contained in the 2019 Proxy Statement to be filed with the SEC and is incorporated in this Annual Report by reference in response to this item.

PART IV

Item 15. Exhibits and Financial Statement Schedules

a. Documents Filed as Part of this Report

The following consolidated financial statements of Surna Inc. are filed as part of this Annual Report on Form 10-K:

Financial Statements	Page(s)
Report of Independent Registered Public Accounting Firm	F-1
Consolidated Balance Sheets as of December 31, 2018 and 2017	F-2
Consolidated Statements of Operations for the Years Ended December 31, 2018 and 2017	F-3
Consolidated Statements of Changes in Shareholders' Equity (Deficit) for the Years Ended December 31, 2018 and 2017	F-4
Consolidated Statements of Cash Flows for the Years Ended December 31, 2018 and 2017	F-5
Notes to Consolidated Financial Statements	F-6

b. Exhibits

See "Exhibit Index" on the page following the consolidated financial statements and related footnotes and the signature page to this Annual Report on Form 10-K.

c. Financial Statement Schedules

No financial statement schedules are filed herewith because (i) such schedules are not required, or (ii) the information has been presented in the aforementioned financial statements.

Item 16. Form 10-K Summary

The Company has elected not to provide the summary of information under this item.

Surna Inc.
Index to Consolidated Financial Statements

Financial Statements	<u>Page(s)</u>
<u>Report of Independent Registered Public Accounting Firm</u>	F-1
<u>Consolidated Balance Sheets as of December 31, 2018 and 2017</u>	F-2
<u>Consolidated Statements of Operations for the Years Ended December 31, 2018 and 2017</u>	F-3
<u>Consolidated Statements of Changes in Shareholders' Equity (Deficit) for the Years Ended December 31, 2018 and 2017</u>	F-4
<u>Consolidated Statements of Cash Flows for the Years Ended December 31, 2018 and 2017</u>	F-5
<u>Notes to Consolidated Financial Statements</u>	F-6

Report of Independent Registered Public Accounting Firm

Shareholders' and Board of Directors
Surna Inc.
Boulder, Colorado

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Surna Inc. and subsidiary (the "Company") as of December 31, 2018 and 2017, the related consolidated statements of operations, shareholders' equity (deficit), and cash flows for the years then ended, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of their operations and their cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

Going Concern Uncertainty

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 3 to the consolidated financial statements, the Company has suffered recurring losses from operations and has a working capital deficiency that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 3. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ ACM LLP

We have served as the Company's auditor since 2017.

Greeley, Colorado
March 19, 2019

Surna Inc.
Consolidated Balance Sheets

	December 31,	
	2018	2017
ASSETS		
Current Assets		
Cash and cash equivalents	\$ 253,387	\$ 2,468,199
Accounts receivable (net of allowance for doubtful accounts of \$119,022 and \$105,267, respectively)	210,187	422,589
Inventory, net	935,886	522,622
Prepaid expenses	127,694	293,458
Other assets	654	550
Total Current Assets	<u>1,527,808</u>	<u>3,707,418</u>
Noncurrent Assets		
Property and equipment, net	520,321	401,356
Goodwill	631,064	631,064
Intangible assets, net	23,028	37,985
Deposits	51,000	51,000
Total Noncurrent Assets	<u>1,225,413</u>	<u>1,121,405</u>
TOTAL ASSETS	<u>\$ 2,753,221</u>	<u>\$ 4,828,823</u>
LIABILITIES AND SHAREHOLDERS' EQUITY		
CURRENT LIABILITIES		
Accounts payable and accrued liabilities	\$ 1,809,129	\$ 1,969,263
Deferred revenue	641,798	1,011,871
Amounts due to shareholders	-	6,927
Derivative liabilities	-	410,880
Total Current Liabilities	<u>2,450,927</u>	<u>3,398,941</u>
NONCURRENT LIABILITIES		
Deferred rent	107,958	17,396
Total Noncurrent Liabilities	<u>107,958</u>	<u>17,396</u>
TOTAL LIABILITIES	<u>2,558,885</u>	<u>3,416,337</u>
Commitments and Contingencies (Note 12)		
SHAREHOLDERS' EQUITY		
Preferred stock, \$0.00001 par value; 150,000,000 shares authorized; 42,030,331 and 77,220,000 shares issued and outstanding, respectively	420	772
Common stock, \$0.00001 par value; 350,000,000 shares authorized; 224,989,794 and 206,248,522 shares issued and outstanding, respectively	2,250	2,062
Additional paid in capital	24,538,027	20,664,563
Accumulated deficit	(24,346,361)	(19,254,911)
Total Shareholders' Equity	<u>194,336</u>	<u>1,412,486</u>
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	<u>\$ 2,753,221</u>	<u>\$ 4,828,823</u>

The accompanying notes are an integral part of these consolidated financial statements.

Surna Inc.
Consolidated Statements of Operations

	For the Years Ended December 31,	
	2018	2017
Revenue, net	\$ 9,581,968	\$ 7,210,241
Cost of revenue	7,132,090	5,299,977
Gross profit	2,449,878	1,910,264
Operating expenses:		
Advertising and marketing expenses	979,711	625,773
Product development costs	317,713	319,680
Selling, general and administrative expenses	5,972,948	5,206,471
Total operating expenses	7,270,372	6,151,924
Operating loss	(4,820,494)	(4,241,660)
Other income (expense):		
Interest and other income, net	58,254	4,097
Interest expense	(2,908)	(41,485)
Amortization of debt discount on convertible promissory notes	-	(63,157)
Loss on extinguishment of debt	-	(643,428)
Gain on change in fair value of derivative liabilities	21,403	66,934
Total other income (expense)	76,749	(677,039)
Loss before provision for income taxes	(4,743,745)	(4,918,699)
Income taxes	-	-
Net loss	\$ (4,743,745)	\$ (4,918,699)
Loss per common share – basic and dilutive	\$ (0.02)	\$ (0.03)
Weighted average number of common shares outstanding, basic and dilutive	218,752,365	182,857,538

The accompanying notes are an integral part of these consolidated financial statements.

Surna Inc.
Consolidated Statements of Changes in Shareholders' Equity (Deficit)

	Preferred Stock		Common Stock			Additional Paid in Capital	Accumulated Deficit	Shareholders' Equity (Deficit)
	Number of Shares	Amount	Number of Shares	Number of Shares to be Issued	Amount			
Balance January 1, 2017	77,220,000	\$ 772	160,744,916	-	\$ 1,607	\$ 12,222,789	\$ (14,336,212)	\$ (2,111,044)
Common shares issued for conversion of debt and interest, net of unamortized debt discount	-	-	10,601,554	-	106	1,751,049	-	1,751,155
Value attributed to modification of warrants	-	-	-	-	-	59,000	-	59,000
Common shares issued with convertible notes payable	-	-	250,000	-	2	39,127	-	39,129
Common shares issued for cash	-	-	31,515,250	-	315	4,452,765	-	4,453,080
Fair value of warrants issued and options granted to directors for compensation	-	-	-	-	-	386,466	-	386,466
Common shares issued as compensation for services	-	-	3,160,494	-	32	434,293	-	434,325
Common shares issued in settlement of restricted stock units awarded as compensation for consulting services	-	-	200,000	-	2	20,497	-	20,499
Fair value of vested restricted stock units awarded to employees and directors	-	-	-	-	-	744,556	-	744,556
Fair value of vested stock options granted to employees	-	-	-	-	-	189,536	-	189,536
Fair value of vested incentive stock bonuses awarded to employees	-	-	-	-	-	364,483	-	364,483
Other common shares	-	-	(223,692)	-	(2)	2	-	-
Net loss	-	-	-	-	-	-	(4,918,699)	(4,918,699)
Balance December 31, 2017	77,220,000	772	206,248,522	-	2,062	20,664,563	(19,254,911)	1,412,486
Cumulative effect of changes due to adoption of ASC 606 revenue recognition	-	-	-	-	-	-	56,912	56,912
Adjusted balance January 1, 2018 to reflect adoption of ASC 606	77,220,000	772	206,248,522	-	2,062	20,664,563	(19,197,999)	1,469,398
Extinguishment of derivative liability upon exercise of investor warrants	-	-	-	-	-	389,477	-	389,477
Common shares issued on cashless exercise of former director and investor warrants	-	-	2,666,865	-	27	(27)	-	-
Common shares issued on exercise of investor warrants and employee options	-	-	125,000	-	1	18,375	-	18,376
Common shares issued or to be issued on settlement of restricted stock units and award of stock bonuses	-	-	8,867,368	1,000,000	88	(88)	-	-
Common shares issued as compensation for services	-	-	1,809,349	-	19	408,617	-	408,636
Common shares issued in settlement agreement	-	-	800,000	-	8	226,392	-	226,400
Fair value of vested restricted stock units awarded to employees and directors	-	-	-	-	-	1,295,368	-	1,295,368
Fair value of vested stock options granted to employees and directors	-	-	-	-	-	160,218	-	160,218
Fair value of vested incentive stock bonuses awarded to employees	-	-	-	-	-	165,208	-	165,208
Common shares issued for cash	-	-	7,562,500	-	76	1,209,924	-	1,210,000
Repurchase of common shares from related party	-	-	(3,125,000)	-	(31)	-	(399,969)	(400,000)

Repurchase of preferred stock									
from related party in exchange									
for issuance of common stock	(35,189,669)	(352)	35,190	-	-	-	(4,648)	(5,000)	
Net loss	-	-	-	-	-	-	(4,743,745)	(4,743,745)	
Balance December 31, 2018	<u>42,030,331</u>	<u>\$ 420</u>	<u>224,989,794</u>	<u>1,000,000</u>	<u>\$ 2,250</u>	<u>\$ 24,538,027</u>	<u>\$ (24,346,361)</u>	<u>\$ 194,336</u>	

The accompanying notes are an integral part of these consolidated financial statements.

Surna Inc.
Consolidated Statements of Cash Flows

	For the Years Ended December 31,	
	2018	2017
Cash Flows From Operating Activities:		
Net loss	\$ (4,743,745)	\$ (4,918,699)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and intangible asset amortization expense	163,700	44,865
Amortization of debt discounts	-	37,637
Amortization of original issue discount on notes payable	-	25,520
Gain on change in derivative liabilities	(21,403)	(66,934)
Compensation paid in equity	2,029,430	2,139,865
Provision for doubtful accounts	13,755	14,267
Provision for excess and obsolete inventory	(28,037)	276,015
Loss on extinguishment of debt	-	643,428
Loss on disposal of other assets	19,279	26,682
Changes in operating assets and liabilities:		
Accounts receivable	198,647	(389,690)
Inventory	(385,227)	(50,732)
Prepaid expenses and other	165,660	(209,032)
Accounts payable and accrued liabilities	61,767	289,905
Deferred revenue	(313,161)	(86,697)
Accrued interest	-	(9,772)
Deferred rent	(9,438)	17,396
Lease deposit	-	(51,000)
Net cash used in operating activities	(2,848,773)	(2,266,976)
Cash Flows From Investing Activities		
Capitalization of intangible assets	(5,028)	(18,624)
Purchases of property and equipment	(261,222)	(183,783)
Proceeds from payment of tenant improvement allowance	100,000	-
Cash disbursed for equipment held for lease	(16,237)	(159,806)
Payments received on note receivable	-	157,218
Net cash used in investing activities	(182,487)	(204,995)
Cash Flows From Financing Activities		
Cash proceeds from sale of common stock and warrants	1,210,000	4,453,080
Payments on convertible notes payable	-	(270,000)
Proceeds from issuance of notes payable	-	500,000
Proceeds from exercises of stock options	3,375	-
Proceeds from exercise of investor warrants	15,000	-
Repurchase of common shares from related party	(400,000)	-
Repurchase of preferred stock from related party	(5,000)	-
Payments on loans from shareholders	(6,927)	(62,456)
Net cash provided by financing activities	816,448	4,620,624
Net (decrease) increase in cash	(2,214,812)	2,148,653
Cash, beginning of year	2,468,199	319,546
Cash, end of year	\$ 253,387	\$ 2,468,199
Supplemental cash flow information:		
Interest paid	\$ -	\$ 44,150
Non-cash investing and financing activities:		
Conversions of promissory notes and accrued interest to common stock	\$ -	\$ 1,751,155
Equity issued in settlement	\$ 226,400	\$ -
Extinguishment of derivative liability on cashless exercise of warrants	\$ 389,477	\$ -
Settlement liability reclassified from deferred revenue	\$ -	\$ 322,776
Warrant modification included in loss on extinguishment of debt	\$ -	\$ 59,000
Common shares issued with notes payable	\$ -	\$ 39,129
Discount on notes payable	\$ -	\$ 37,500
Unpaid purchases of equipment and other assets	\$ 4,500	\$ 18,729

The accompanying notes are an integral part of these consolidated financial statements.

Note 1 – Description of Business

Surna Inc. (the “Company”) was incorporated in Nevada on October 15, 2009. The Company designs, engineers and manufactures application-specific environmental control and air sanitation systems for commercial, state- and provincial-regulated indoor cannabis cultivation facilities in the U.S. and Canada. Currently, the Company’s revenue stream is derived primarily from supplying its products, services and technologies to commercial indoor cannabis cultivation facilities. Headquartered in Boulder, Colorado, the Company’s engineering and technical team provides solutions that allow growers to meet the unique demands of a cannabis cultivation environment through precise temperature, humidity, light, and process controls, energy and water efficiency, and satisfaction of the evolving code and regulatory requirements being imposed at the state and local levels. The Company’s objective is to leverage its unique experience in this space in order to bring value-added climate control solutions to its customers that help improve their overall crop quality and yield as well as optimize the resource efficiency of their controlled environment (i.e., indoor and sealed greenhouses) cultivation facilities. The Company is not involved in the production or sale of cannabis.

Note 2 – Basis of Presentation; Summary of Significant Accounting Policies

Financial Statement Presentation

The preparation of the consolidated financial statements in conformity with accounting principles generally accepted in the United States of America (“GAAP”) requires management to make estimates and assumptions that affect reported amounts and related disclosures. In the opinion of management, all adjustments (consisting of normal recurring items) considered necessary for a fair presentation have been included.

The accompanying consolidated financial statements have been prepared on a going-concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. The Company has not generated sufficient revenue and has funded its operating losses through the sale of common stock and the issuance of debt. The Company is subject to risks, expenses and uncertainties similar to those encountered by similarly situated companies. See Note 3.

Basis of Consolidation and Reclassifications

The consolidated financial statements include the accounts of the Company and its controlled and wholly-owned subsidiary, Hydro Innovations, LLC (“Hydro”). Intercompany transactions, profit, and balances are eliminated in consolidation.

The Company has reclassified other receivables in 2018 and included them in the Company’s presentation of other assets. These reclassifications have been applied consistently to the periods presented and had no impact on net loss, total assets and liabilities, or shareholders’ equity.

Use of Estimates

Management makes estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and that affect the reported amounts of revenue and expenses during the reporting period. The Company bases its estimates on historical experience and on various other assumptions that it believes to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ from those estimates. Key estimates include: allocation of transaction prices to performance obligations under contracts with customers, standalone selling prices, timing of expected revenue recognition on remaining performance obligations under contracts with customers, valuation of derivative liabilities, valuation of intangible assets, valuation of equity-based compensation, valuation of deferred tax assets and liabilities, warranty accruals, inventory allowances, and legal contingencies.

Cash and Cash Equivalents

All highly liquid investments with original maturities of three months or less at the date of purchase are considered to be cash equivalents. The Company may, from time to time, have deposits in financial institutions that exceed the federally insured amount. The Company has not experienced any losses to date on depository accounts.

Accounts Receivable and Allowance for Doubtful Accounts

Accounts receivables are recorded at the invoiced amount, or based on revenue earned for items not yet invoiced, and generally do not bear interest. An allowance for doubtful accounts is established, as necessary, based on past experience and other factors, which, in management's judgment, deserve current recognition in estimating bad debts. Based on the Company's review, it establishes or adjusts the allowance for specific customers and the accounts receivable portfolio as a whole. As of December 31, 2018 and 2017, the allowance for doubtful accounts was \$119,022 and \$105,267, respectively. If the financial condition of our customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required.

Inventory

Inventory is stated at the lower of cost or market. The inventory is valued based on a first-in, first-out ("FIFO") basis. Lower of cost or net realizable value is evaluated by considering obsolescence, excessive levels of inventory, deterioration and other factors. Adjustments to reduce the cost of inventory to its net realizable value, if required, are made for estimated excess, obsolescence or impaired inventory. Excess and obsolete inventory is charged to cost of revenue and a new lower-cost basis for that inventory is established and subsequent changes in facts and circumstances do not result in the restoration or increase in that newly established cost basis. As of December 31, 2018 and 2017, the allowance for excess and obsolete inventory was \$295,347 and \$323,384, respectively.

Property and Equipment

Property and equipment are stated at cost. For financial statement purposes, property and equipment are recorded at cost and depreciated using the straight-line method over their estimated useful lives, which is generally five years. Leasehold improvements are amortized on a straight-line basis over the lesser of their useful lives or the life of the lease. Upon sale or retirement of assets, the cost and related accumulated depreciation and amortization are removed from the balance sheet and the resulting gain or loss is reflected in operations. Maintenance and repairs are charged to operations as incurred.

Long-lived tangible assets, including property and equipment, are reviewed for impairment whenever events or changes in business circumstances indicate the carrying value of the assets may not be recoverable. When such an event occurs, management determines whether there has been impairment by comparing the anticipated undiscounted future net cash flows to the related asset's carrying value. If an asset is considered impaired, the asset is written down to fair value, which is determined based either on discounted cash flows or appraised value, depending on the nature of the asset. The Company has not identified any indicators of impairment during the years ended December 31, 2018 and 2017.

Goodwill and Intangible Assets

The Company recorded goodwill in connection with its acquisition of Hydro in July 2014. Goodwill is reviewed for impairment annually or more frequently when events or changes in circumstances indicate that fair value of the reporting unit has been reduced to less than its carrying value. The Company performs a quantitative impairment test annually during the fourth quarter by comparing the fair value of the reporting unit with its carrying amount, including goodwill. If the fair value of the reporting unit exceeds its carrying amount, goodwill is considered not impaired. An impairment charge would be recognized for the amount by which the carrying amount exceeds the reporting unit's fair value. The Company determined that it has one reporting unit. The Company completed this assessment as of December 31, 2018, and concluded that no impairment existed.

Separable identifiable intangibles consist of intellectual property such as patents and trademarks, and capitalized website costs. Except for trademarks, which are not amortized, the Company's separable identifiable intangible assets are subject to amortization on a straight-line basis over their estimated useful lives. Separable identifiable intangibles are also subject to evaluation for potential impairment if events or circumstances indicate the carrying value may not be recoverable.

Fair Value Measurement

The Company records its financial assets and liabilities at fair value. The accounting standard for fair value provides a framework for measuring fair value, clarifies the definition of fair value, and expands disclosures regarding fair value measurements. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (an exit price) in an orderly transaction between market participants at the reporting date. The accounting standard establishes a three-tier hierarchy, which prioritizes the inputs used in the valuation methodologies in measuring fair value:

Surna Inc.
Notes to Consolidated Financial Statements

Level 1 - inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2 - inputs are quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument.

Level 3 - inputs are unobservable inputs based on the Company's assumptions used to measure assets and liabilities at fair value.

On a Recurring Basis

A financial asset or liability's classification within the hierarchy is determined based on the lowest level of input that is significant to the fair value measurement. The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires management to make judgments and consider factors specific to the asset or liability.

As of December 31, 2017, the Company had outstanding warrants to purchase common stock that were issued in connection with Series 3 convertible notes ("Series 3 Warrants") that provided for a reduction in the exercise price of the warrants in the event the Company issued common stock in a registered offering at a price below the exercise price. See Notes 10 and 11. In such event, the exercise price under the warrants would be reduced to the price of the common stock in the dilutive issuance.

The Company determined that these outstanding Series 3 Warrants, which were subject to the exercise price reduction, qualified as a derivative financial instrument. Accordingly, the Series 3 Warrants were marked to market at the end of each reporting period. Any change in fair value during the period was recorded in as gain (loss) on change in derivative liabilities in the Company's consolidated statements of operations. See Note 11 for a discussion of the impact the derivative financial instruments had on the Company's consolidated financial statements and results of operations.

Financial liabilities carried at fair value, measured on a recurring basis were as follows:

	As of December 31, 2018					As of December 31, 2017				
	Level 1	Level 2	Level 3	Fair Value	Gain ⁽¹⁾	Level 1	Level 2	Level 3	Fair Value	Gain ⁽²⁾
Financial liabilities:										
Derivative liabilities - warrants	\$ -	\$ -	\$ -	\$ -	\$21,403	\$ -	\$ -	\$410,880	\$410,880	\$66,934
Total financial liabilities	\$ -	\$ -	\$ -	\$ -	\$21,403	\$ -	\$ -	\$410,880	\$410,880	\$66,934

(1) The gain on change in derivative liabilities presented in the statements of operations for the year ended December 31, 2018 represents the gain on derivatives through the cashless exercise of all of the associated warrants during the first quarter of 2018.

(2) Represents the gain on change in derivative liabilities for the year ended December 31, 2017.

The change in the balance of the warrant derivative liabilities during the year ended December 31, 2017 was calculated using the Black-Scholes Option Pricing Model (the "Black-Scholes Model"), which is classified as gain (loss) on change in warrant derivative liabilities in the consolidated statements of operations. The Black-Scholes Model does take into consideration the Company's stock price, historical volatility, and the risk-free interest rate, which do have observable Level 1 or Level 2 inputs.

Due to their short-term nature, the carrying values of cash and cash equivalents, accounts receivable, accounts payable, and accrued expenses, approximate fair value.

Derivative Financial Instruments

The Company evaluates its financial instruments to determine if such instruments are derivatives or contain features that qualify as embedded derivatives. For derivative financial instruments that are accounted for as liabilities, the derivative instrument is initially recorded at its fair value and is then re-valued at each reporting date, with changes in the fair value reported in the statements of operations. For stock-based derivative financial instruments, the Company uses the Black-Scholes Model to value the derivative instruments. The classification of derivative instruments, including whether such instruments should be recorded as liabilities or as equity, is evaluated at the end of each reporting period. Derivative instrument liabilities are classified in the balance sheet as current or non-current based on whether or not net-cash settlement of the derivative instrument could be required within twelve months of the balance sheet date.

Surna Inc.
Notes to Consolidated Financial Statements

Revenue Recognition

On January 1, 2018, the Company adopted Accounting Standards Update (“ASU”) 2014-09 (Topic 606), *Revenue from Contracts with Customers* and all the related amendments (“ASC 606” or the “new revenue standard”) to all contracts and elected the modified retrospective method. The results for periods before 2018 were not adjusted for the new revenue standard and the cumulative effect of the change in accounting was recognized through accumulated deficit at the date of adoption. The comparative financial information presented has not been restated and continues to be reported under the accounting standards in effect for those periods. The Company expects the impact of the adoption of the new revenue standard to be immaterial to its net income (loss) on an ongoing basis.

The cumulative effect of the changes made to the consolidated balance sheet for the adoption of the new revenue standard as of January 1, 2018 was as follows:

	Balance as of December 31, 2017	Adjustments Due to ASC 606	Balance as of January 1, 2018
Balance Sheet			
Liabilities			
Deferred Revenue	\$ 1,011,871	\$ (56,912)	\$ 954,959
Shareholders' Equity			
Accumulated deficit	\$ (19,254,911)	\$ 56,912	\$ (19,197,999)

In accordance with the new revenue standard's requirements, the disclosure of the impact of adoption on the consolidated income statements and balance sheets for the year ended December 31, 2018 was as follows:

	For the Year Ended December 31, 2018		
	As Reported	Balances Without Adoption of ASC 606	Effect of Change Higher/(Lower)
Income Statement			
Revenues			
Revenues	\$ 9,581,968	\$ 9,611,380	\$ (29,412)
Net loss	\$ (4,743,745)	\$ (4,714,333)	\$ 29,412
Balance Sheet			
Liabilities			
Deferred Revenue	\$ 641,798	\$ 669,298	\$ (27,500)
Shareholders' Equity			
Accumulated deficit	\$ (24,346,361)	\$ (24,373,861)	\$ (27,500)

The following table sets forth the Company's revenue by source:

	For the Years Ended December 31,	
	2018	2017
Equipment sales	\$ 8,288,102	\$ 6,255,150
Engineering and other services	1,040,764	588,849
Shipping and handling	243,072	238,908
Other revenue	10,030	127,334
Total revenue	\$ 9,581,968	\$ 7,210,241

The Company accounts for sales taxes and other related taxes on a net basis, excluding such taxes from revenue.

Revenue Recognition Accounting Policy Summary

The Company accounts for revenue in accordance with the new revenue standard. Under the new revenue standard, a performance obligation is a promise in a contract with a customer to transfer a distinct good or service to the customer. Most of the Company's contracts contain multiple performance obligations that include engineering and technical services as well as the delivery of a diverse range of climate control system equipment and components, which can span multiple phases of a customer's project life-cycle from facility design and construction to equipment delivery and system installation and start-up. The Company does not provide construction services or system installation services. Some of the Company's contracts with customers contain a single performance obligation, typically engineering only services contracts.

A contract's transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. When there are multiple performance obligations within a contract, the Company allocates the transaction price to each performance obligation based on standalone selling price. The Company determines the standalone selling price for each of the performance obligations at the inception of the contract and does not adjust the initial allocation for future changes in any selling prices. When estimating the selling price, the Company uses various observable inputs. The best observable input is the Company's actual selling price for the same good or service, however, this input is generally not available for the Company's contracts containing multiple performance obligations. For engineering services, the Company estimates the standalone selling price by reference to certain physical characteristics of the project, such as facility size and mechanical systems involved, which are indicative of the scope and complexity of the mechanical engineering services to be provided. For equipment sales, the standalone selling price is determined by forecasting the expected costs of the equipment and then adding an appropriate margin, based on a range of acceptable margins established by management. Depending on the nature of the performance obligations, the Company may use a combination of different methods and observable inputs if certain performance obligations have highly variable or uncertain standalone selling prices. Once the selling prices are determined, the Company applies the relative values to the total contract consideration and estimates the amount of the transaction price to be recognized as each promise is fulfilled.

Generally, satisfaction occurs when control of the promised goods is transferred to the customer or as services are rendered or completed in exchange for consideration in an amount for which the Company expects to be entitled. The Company recognizes revenue for the sale of goods when control transfers to the customer, which primarily occurs at the time of shipment. The Company's historical rates of return are insignificant as a percentage of sales and, as a result, the Company does not record a reserve for returns at the time the Company recognizes revenue. The Company has elected to exclude from the measurement of the transaction price all taxes (e.g., sales, use, value added, and certain excise taxes) that are assessed by a governmental authority in connection with a specific revenue-producing transaction and collected by the Company from the customer. Accordingly, the Company recognizes revenue net of sales taxes. The revenue and cost for freight and shipping is recorded when control over the sale of goods passes to the Company's customers.

The Company also has performance obligations to perform certain engineering services that are satisfied over a period of time. Performance obligations are satisfied over-time if the customer receives the benefits as the Company performs work, if the customer controls the asset as it is being produced, or if the product being produced for the customer has no alternative use and the Company has a contractual right to payment. Revenue is recognized from this type of performance obligation as services are rendered based on the percentage completion towards certain specified milestones.

The Company offers assurance-type warranties for its products and products manufactured by others to meet specifications defined by the contracts with customers and does not have any material separate performance obligations related to these warranties. The Company maintains a warranty reserve based on historical warranty costs.

Other Judgments and Assumptions

The Company typically receives customer payments in advance of its performance of services or transfers of goods. Under the new revenue standard, the Company is required to adjust the promised amount of consideration for a significant financing component to recognize revenue at an amount that reflects the price that a customer would have paid for the promised goods or services if the customer had paid cash for those goods or services when (or as) they transfer to the customer (that is, the cash selling price). Applying the practical expedient in ASC 606-10-32-18, which the Company has elected, the Company does not adjust the promised amount of consideration for the effects of a significant financing component since the Company expects, at contract inception, that the period between when the Company transfers a promised good or service to a customer and when the customer pays for that good or service will be one year or less. Accordingly, the remaining performance obligations related to customer contracts does not consider the effects of the time value of money.

Applying the practical expedient in ASC 340-40-25-4, the Company recognizes the incremental costs of obtaining contracts as an expense when incurred since the amortization period of the assets that the Company otherwise would have recognized is one year or less. These costs include certain sales commissions and incentives, which are included in selling, general and administrative expenses, and are payable only when associated revenue has been collected and earned by the Company. For sake of clarity, net revenues are considered earned only after the service/product has been completed/shipped to the Company's customer and the Company is able to recognize such net revenue on its financial statement in accordance with generally accepted accounting principles.

Contract Assets and Contract Liabilities

Contract assets reflect revenue recognized and performance obligations satisfied in advance of customer billing. Contract liabilities relate to payments received in advance of the satisfaction of performance under the contract. The Company receives payments from customers based on the terms established in its contracts.

Contract assets include unbilled amounts where revenue recognized exceeds the amount billed to the customer and the right of payment is conditional, subject to completing a milestone, such as a phase of a project. The Company typically does not have material amounts of contract assets since revenue is recognized as control of goods are transferred or as services are performed. As of December 31, 2018 and 2017, the Company had no contract assets.

Contract liabilities consist of advance payments in excess of revenue recognized. The Company's contract liabilities are recorded as a current liability in deferred revenue in the consolidated balance sheets since the timing of when the Company expects to recognize revenue is generally less than one year. As of December 31, 2018 and 2017, deferred revenue, which was classified as a current liability, was \$641,798 and \$1,011,871, respectively.

For the year ended December 31, 2018, the Company recognized revenue of \$876,350 related to the deferred revenue at January 1, 2018, or 87%.

Remaining Performance Obligations

Remaining performance obligations, or backlog, represents the aggregate amount of the transaction price allocated to the remaining obligations that the Company has not performed under its customer contracts. The Company has elected not to use the optional exemption in ASC 606-10-50-14, which exempts an entity from such disclosures if a performance obligation is part of a contract with an original expected duration of one year or less. Accordingly, the information disclosed about remaining performance obligations includes all customer contracts, including those with an expected duration of one year or less.

Industry uncertainty, project financing concerns, and the licensing and qualification of our prospective customers, which are out of the Company's control, make it difficult for the Company to predict when it will recognize revenue on its remaining performance obligations. There are risks that the Company may not realize the full contract value on customer projects in a timely manner or at all, and completion of a customer's cultivation facility project is dependent upon the customer's ability to secure funding and real estate, obtain a license and then build their cultivation facility so they can take possession of the equipment. Accordingly, the time it takes for customers to complete a project, which corresponds to when the Company is able to recognize revenue, is driven by numerous factors including: (i) the large number of first-time participants interested in the indoor cannabis cultivation business; (ii) the complexities and uncertainties involved in obtaining state and local licensure and permitting; (iii) local and state government delays in approving licenses and permits due to lack of staff or the large number of pending applications, especially in states where there is no cap on the number of cultivators; (iv) the customer's need to obtain cultivation facility financing; (v) the time needed, and coordination required, for our customers to acquire real estate and properly design and build the facility (to the stage when climate control systems can be installed); (vi) the large price tag and technical complexities of the climate control and air sanitation system; (vii) the availability of power; and (viii) delays that are typical in completing any construction project.

Surna Inc.
Notes to Consolidated Financial Statements

As of December 31, 2018, the Company's remaining performance obligations, or backlog, was \$8,529,000, of which \$6,997,000, or 82%, was attributable to customer contracts for which the Company has only received an initial advance payment to cover the allocated value of the Company's engineering services ("engineering only paid contracts"). There are enhanced risks that the equipment portion of these engineering only paid contracts will not be completed or will be delayed, which could occur if the customer is dissatisfied with the quality or timeliness of the Company's engineering services or there is a delay or abandonment of the project because of the customer's inability to obtain project financing or licensing or other reasons. After the customer has made an advance payment for a portion of the equipment to be delivered under the contract ("partial equipment paid contracts"), the Company is typically better able to estimate the timing of revenue recognition since the risks and delays associated with licensing, permitting and project funding are typically mitigated once the initial equipment payment is received. There is significant uncertainty regarding the timing of the Company's recognition of revenue on its remaining performance obligations, and there is no certainty that these will result in actual revenues. The remaining performance obligations expected to be recognized through 2021 are as follows:

	2019	2020	2021	Total
Remaining performance obligations related to engineering only paid contracts	\$ 4,164,000	\$ 198,000	\$ 2,635,000	\$ 6,997,000
Remaining performance obligations related to partial equipment paid contracts	\$ 1,141,000	\$ 391,000	\$ -	\$ 1,532,000
Total remaining performance obligations	\$ 5,305,000	\$ 589,000	\$ 2,635,000	\$ 8,529,000

Product Warranty

The Company warrants the products that it manufactures for a warranty period equal to the lesser of 12 months from start-up or 18 months from shipment. The Company's warranty provides for the repair, rework, or replacement of products (at the Company's option) that fail to perform within stated specification. The Company's third-party suppliers also warrant their products under similar terms, which are passed-through to the Company's customers.

The Company assesses the historical warranty claims on its manufactured products and, since 2016, warranty claims have been approximately 1% of annual revenue generated on these products. The Company continues to assess the need to record a warranty reserve at the time of sale based on historical claims and other factors. As of December 31, 2018 and 2017, the Company had an accrued warranty reserve amount of \$144,822 and \$105,122, respectively, which are included in accounts payable and accrued liabilities on the Company's consolidated balance sheets.

Concentrations

No customers accounted for more than 10% of the Company's revenue for the year ended December 31, 2018. Two customers accounted for 12% and 11% of the Company's revenue for the year ended December 31, 2017.

The Company's accounts receivable from three customers made up 17%, 12%, and 11%, respectively, of the total balance as of December 31, 2018. The Company's accounts receivable from three customers made up 52%, 17%, and 17% of the total balance as of December 31, 2017.

One supplier accounted for 39% of the Company's purchases of inventory for the year ended December 31, 2018 and two suppliers accounted for 35% and 10% of the Company's purchases of inventory for the year ended December 31, 2017.

Product Development

The Company expenses product development costs as incurred. Internal product development costs are expensed as incurred, and third-party product developments costs are expensed when the contracted work has been performed or as milestone results have been achieved. For the years ended December 31, 2018 and 2017, the Company incurred \$317,713 and \$319,680, respectively, on product development.

Accounting for Share-Based Compensation

The Company recognizes the cost resulting from all share-based compensation arrangements, including stock options, restricted stock awards and restricted stock units that the Company grants under its equity incentive plan in its consolidated financial statements based on their grant date fair value. The expense is recognized over the requisite service period or performance period of the award. Awards with a graded vesting period based on service are expensed on a straight-line basis for the entire award. Awards with performance-based vesting conditions which require the achievement of a specific company financial performance goal at the end of the performance period and required service period are recognized over the performance period. Each reporting period, the Company reassesses the probability of achieving the respective performance goal. If the goals are not expected to be met, no compensation cost is recognized and any previously recognized amount recorded is reversed.

Surna Inc.
Notes to Consolidated Financial Statements

The grant date fair value of stock options is based on the Black-Scholes Model. The Black-Scholes Model requires judgmental assumptions including volatility and expected term, both based on historical experience. The risk-free interest rate is based on U.S. Treasury interest rates whose term is consistent with the expected term of the option.

The grant date fair value of restricted stock and restricted stock units is based on the closing price of the underlying stock on the date of the grant.

Share-based compensation expense is reduced for forfeitures as the forfeitures occur since the Company does not have historical data or other factors to appropriately estimate the expected employee terminations and to evaluate whether particular groups of employees have significantly different forfeiture expectations.

Share-based awards granted to non-employees are recorded at their fair value on the measurement date and are subject to periodic adjustment as the underlying share-based awards vest.

Share-based payments to employees, directors and non-employees totaled \$2,029,430 and \$2,139,865 for the years ended December 31, 2018 and 2017, respectively.

Share-based compensation costs are classified in the Company's consolidated financial statements in the same manner as if such compensation was paid in cash. The following is a summary of share-based compensation costs included in the Company's consolidated statements of operations for the years ended December 31, 2018 and 2017:

	For the Year Ended December 31,	
	2018	2017
Share-based compensation expense included in:		
Cost of revenue	\$ 100,736	\$ 75,255
Advertising and marketing expenses	7,671	16,377
Product development costs	4,548	5,956
Selling, general and administrative expenses	1,916,475	2,042,277
Total share-based compensation expense included in consolidated statement of operations	\$ 2,029,430	\$ 2,139,865

Income Taxes

The Company accounts for income taxes under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this method, the Company determines deferred tax assets and liabilities on the basis of the differences between the financial statement and tax bases of assets and liabilities by using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date.

The Company recognizes deferred tax assets to the extent that the Company believes that these assets are more likely than not to be realized. In making such a determination, the Company considers all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax-planning strategies, and results of recent operations. If the Company determines that it would be able to realize its deferred tax assets in the future in excess of their net recorded amount, the Company would make an adjustment to the deferred tax asset valuation allowance, which would reduce the provision for income taxes.

The Company records uncertain tax positions on the basis of a two-step process in which: (i) the Company determines whether it is more likely than not that the tax positions will be sustained on the basis of the technical merits of the position, and (ii) for those tax positions that meet the more-likely-than-not recognition threshold, the Company recognizes the largest amount of tax benefit that is more likely than not to be realized upon ultimate settlement with the related tax authority.

Basic and Diluted Net Loss per Common Share

Basic net loss per common share is computed by dividing net loss by the weighted-average number of common shares outstanding during the period. Diluted net loss per common share is determined using the weighted-average number of common shares outstanding during the period, adjusted for the dilutive effect of common stock equivalents. In periods when losses are reported, the weighted-average number of common shares outstanding excludes common stock equivalents, because their inclusion would be anti-dilutive.

Commitments and Contingencies

In the normal course of business, the Company is subject to loss contingencies, such as legal proceedings and claims arising out of its business, that cover a wide range of matters, including, among others, customer disputes, government investigations and tax matters. An accrual for a loss contingency is recognized when it is probable that an asset had been impaired or a liability had been incurred and the amount of loss can be reasonably estimated.

Other Risks and Uncertainties

To achieve profitable operations, the Company must successfully develop, manufacture and market its products. There can be no assurance that any such products can be developed or manufactured at an acceptable cost and with appropriate performance characteristics, or that such products will be successfully marketed. These factors could have a material adverse effect upon the Company's financial results, financial position, and future cash flows.

The Company is subject to risks common to similarly-situated companies including, but not limited to, new technological innovations, dependence on key personnel, protection of proprietary technology, compliance with government regulations, uncertainty of market acceptance of products, product liability, and the need to obtain additional financing. As a supplier of services and equipment to cannabis cultivators, the Company is also subject to risks related to the cannabis industry. Although certain states have legalized medical and/or recreational cannabis, U.S. federal laws continue to prohibit marijuana in all its forms as well as its derivatives. Any changes in the enforcement of U.S. federal laws may adversely affect the implementation of state and local cannabis laws and regulations that permit medical or recreational cannabis and, correspondingly, may adversely impact the Company's customers. The Company's success is also dependent upon its ability to raise additional capital and to successfully develop and market its products. See Note 3.

Segment Information

Operating segments are defined as components of an enterprise about which separate financial information is available that is evaluated regularly by the Company's senior management team in deciding how to allocate resources and in assessing performance. The Company has one operating segment that is dedicated to the manufacture and sale of its products.

Recently Issued Accounting Pronouncements

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820) — Disclosure Framework — Changes to the Disclosure Requirements for Fair Value Measurement*, which modifies the disclosure requirements on fair value measurements in *Topic 820*. The amendment will be effective for reporting periods beginning after December 15, 2019, and early adoption is permitted. The Company is currently assessing the impact of the ASU on its consolidated results of operations, cash flows and financial position.

In June 2018, the FASB adopted ASU 2018-07, *Compensation — Stock Compensation (Topic 718) — Improvements to Nonemployee Share-Based Payment Accounting*, which expands the scope of *Topic 718* to include all share-based payment transactions for acquiring goods and services from nonemployees. ASU 2018-07 specifies that *Topic 718* applies to all share-based payment transactions in which the grantor acquires goods and services to be used or consumed in its own operations by issuing share-based payment awards. ASU 2018-07 also clarifies that *Topic 718* does not apply to share-based payments used to effectively provide (1) financing to the issuer, or (2) awards granted in conjunction with selling goods or services to customers as part of a contract accounted for under ASC 606. ASU 2018-07 is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years, with early adoption permitted, but no earlier than the Company's adoption of ASC 606. The Company does not believe the adoption of this new accounting guidance will have a material impact on its consolidated results of operations, cash flows and financial position.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*. ASU 2016-13 introduces an expected credit loss methodology for the impairment of financial assets measured at amortized cost basis. This methodology reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates and replaces the probable, incurred loss model for those assets. In November 2018, the FASB issued ASU 2018-19, *Codification Improvements to Topic 326, Financial Instruments – Credit Losses*, which clarifies that receivables arising from operating leases are not within the scope of *Subtopic 326-20*, but, instead, the impairment of receivables arising from operating leases are accounted for in accordance with *Topic 842, Leases*. ASU 2016-13 is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. Entities may early adopt the amendments within this ASU but not prior to the fiscal years beginning after December 15, 2018, including the interim periods within those fiscal years. The Company is currently evaluating the effect that adopting this new accounting guidance will have on its consolidated results of operations, cash flows and financial position.

In February 2016, the FASB adopted ASU 2016-02, *Leases (Topic 842)* which amends the existing accounting standards for lease accounting, including requiring lessees to recognize most leases on their balance sheet and to disclose key information about leasing arrangements. Current GAAP does not require lessees to recognize assets and liabilities related to operating leases on the balance sheet. In July 2018, the FASB issued ASU 2018-10, *Codification Improvements to Topic 842, Leases* and ASU 2018-11, *Targeted Improvements to Topic 842, Leases*, which make improvements and provide clarity to several aspects of the guidance in ASC 842. The new standard establishes a right-of-use model ("ROU") that requires a lessee to recognize a ROU asset and lease liability on the balance sheet for all leases with a term longer than 12 months. Leases will be classified as finance or operating, with classification affecting the pattern and classification of expense recognition in the income statement. The new standard is effective for the Company on January 1, 2019, with early adoption permitted. An entity may choose to use either: (i) its effective date, or (ii) the beginning of the earliest comparative period presented in the financial statements as its date of initial application. The Company has adopted the standard effective January 1, 2019 and has chosen to use the effective date as the date of initial application. Consequently, financial information will not be updated, and the disclosures required under the new standard will not be provided, for dates and periods prior to January 1, 2019. The new standard provides a number of optional practical expedients in transition. The Company has elected to apply the "package of practical expedients" which allow the Company to not reassess (i) whether existing or expired arrangements contain a lease, (ii) the lease classification of existing or expired leases, or (iii) whether previous initial direct costs would qualify for capitalization under the new lease standard. The Company has also elected to apply (i) the practical expedient which allows the Company to not separate lease and non-lease components, and (ii) the short-term lease exemption for all leases with an original term of less than 12 months, for purposes of applying the recognition and measurements requirements in the new standard. The adoption of the new standard is expected to result in the recognition of additional lease liabilities of approximately \$822,000, and ROU assets of approximately \$688,000, net of the deferred rent liability, as of January 1, 2019 related to the Company's operating leases. The Company does not expect that the new standard will have a material impact to the Company's consolidated statement of operations or its consolidated statement of cash flows.

Other accounting standards that have been issued or proposed by FASB that do not require adoption until a future date are not expected to have a material impact on the financial statements upon adoption. The Company does not discuss recent pronouncements that are not anticipated to have an impact on or are unrelated to its financial condition, results of operations, cash flows or disclosures.

Note 3 – Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business.

The Company has experienced recurring losses since its inception. The Company incurred a net loss of approximately \$4,744,000 for the year ended December 31, 2018, and had an accumulated deficit of approximately \$24,346,000 as of December 31, 2018. Since inception, the Company has financed its activities principally through debt and equity financing. Management expects to incur additional losses and cash outflows in the foreseeable future in connection with development of its operating activities. As of December 31, 2018, the Company has a working capital deficit of approximately \$923,000.

The Company is subject to a number of risks similar to those of other similar stage companies, including dependence on key individuals, successful development, marketing and branding of products; uncertainty of product development and generation of revenues; dependence on outside sources of financing; risks associated with research, development; dependence on third-party suppliers and collaborators; protection of intellectual property; and competition with larger, better-capitalized companies. Ultimately, the attainment of profitable operations is dependent on future events, including obtaining adequate financing to fulfill its development activities and generating a level of revenues adequate to support the Company's cost structure.

In June 2018, the Company issued 7,562,500 investment units to accredited investors at a unit price of \$0.16 for gross proceeds of \$1,210,000, with each unit consisting one share of common stock and a warrant to purchase one share of common stock. There can be no assurance that the Company will be able to raise debt or equity financing in sufficient amounts, when and if needed, on acceptable terms or at all. The Company's ability to raise equity capital is also limited by the Company's stock price, and any such issuance could be highly dilutive to existing shareholders. Since November 2018, the Company has undertaken a number of cost saving initiatives (including a workforce reduction) designed to preserve the Company's limited cash resources. While the Company's 2018 revenue of approximately \$9,582,000 represents an increase of almost 33% over the prior year, the Company's revenue recognition on contracts continues to be unpredictable and inconsistent quarter-over-quarter. In addition, the Company's efforts to expand and upgrade its products has resulted in additional working capital being allocated to equipment purchases and increased inventory levels.

Surna Inc.
Notes to Consolidated Financial Statements

If results of operations for 2019 do not meet management's expectations, or additional capital is not available, management believes it has the ability to reduce certain expenditures. The precise amount and timing of the funding needs cannot be determined accurately at this time, and will depend on a number of factors, including the market demand for the Company's products and services, the quality of product development efforts, management of working capital, and continuation of normal payment terms and conditions for purchase of the Company's products. The Company believes its cash balances and cash flow from operations will be insufficient to fund its operations for the next twelve months. If the Company is unable to substantially increase revenues, reduce expenditures, or otherwise generate cash flows for operations, then the Company will need to raise additional funding to continue as a going concern.

The foregoing factors raise substantial doubt about the Company's ability to continue as a going concern for a period of one year from the date the financial statements are issued. These consolidated financial statements do not include any adjustment that might result from the outcome of this uncertainty.

Note 4 – Inventory

Inventory consisted of the following:

	As of December 31,	
	2018	2017
Finished goods	\$ 869,895	\$ 569,047
Work in progress	9,080	14,348
Raw materials	352,258	262,611
Allowance for excess & obsolete inventory	(295,347)	(323,384)
Inventory, net	<u>\$ 935,886</u>	<u>\$ 522,622</u>

Overhead expenses of \$34,000 and \$28,554 were included in the inventory balance as of December 31, 2018 and 2017, respectively.

Note 5 – Property and Equipment

Property and equipment consisted of the following:

	As of December 31,	
	2018	2017
Furniture and equipment	\$ 386,047	\$ 326,894
Equipment held for lease to related party	176,042	159,806
Vehicles	15,000	15,000
Leasehold improvements	215,193	33,257
	<u>792,282</u>	<u>534,957</u>
Accumulated depreciation	(271,961)	(133,601)
Property and equipment, net	<u>\$ 520,321</u>	<u>\$ 401,356</u>

Depreciation expense amounted to \$158,683 for the year ended December 31, 2018, of which \$7,940 was allocated to cost of revenue. Depreciation expense amounted to \$39,978 for the year ended December 31, 2017, of which \$8,302 was allocated to cost of revenue.

Surna Inc.
Notes to Consolidated Financial Statements

As of December 31, 2018, the Company has recorded \$176,042 for the cost of the equipment located at the Sterling facility as leased equipment under fixed assets and accumulated depreciation of \$39,120. See Note 8.

Note 6 – Intangible Assets

Intangible assets consisted of the following:

	As of December 31,	
	2018	2017
Patents	\$ 20,012	\$ 29,952
Website development costs	22,713	22,713
Trademarks	1,830	1,830
	44,555	54,495
Accumulated amortization	(21,527)	(16,510)
Intangible assets, net	\$ 23,028	\$ 37,985

Patents when issued are amortized over 14 years, and web site development costs are amortized over five years. Trademarks are not amortized since they have an indefinite life. Amortization expense for intangibles amounted to \$5,017 and \$4,887 for the years ended December 31, 2018 and 2017, respectively.

Note 7 – Accounts Payable and Accrued Liabilities

Accounts payable and accrued liabilities consisted of the following:

	As of December 31,	
	2018	2017
Accounts payable	\$ 1,278,678	\$ 1,159,975
Sales commissions payable	56,277	21,931
Accrued payroll liabilities	127,915	58,557
Product warranty accrual	144,822	105,122
Commercial dispute settlement	-	332,418
Other accrued expenses	201,437	291,260
Total	\$ 1,809,129	\$ 1,969,263

Note 8 – Related Party Agreements and Transactions

Amounts Due to Shareholders

In July 2014, the Company issued a \$250,000 unsecured promissory note (“Hydro Note”) to Stephen and Brandy Keen as part of the purchase price of Hydro. Mr. Keen is a principal shareholder of the Company and was a former executive officer and director, and was formerly a consultant to the Company (see below). Ms. Keen, the spouse of Mr. Keen, is also a principal shareholder of the Company and previously served as an executive officer and director of the Company (see below). As of December 31, 2017, the Hydro Note had a balance of \$6,927, which was reflected on the Company’s consolidated balance sheet as a current liability. During the year ended December 31, 2018, the balance of the Hydro Note was paid in full.

Stephen Keen Consulting Agreement

In May 2017, the Company’s Board of Directors (the “Board”) approved a three-year consulting agreement under which Mr. Keen agreed to provide certain consulting services to the Company including research and development, new product design and innovations, existing product enhancements and improvements, and other technology advancements with respect to the Company’s business and products in exchange for an annual consulting fee of \$30,000. Pursuant to the terms of the consulting agreement, the Company recorded consulting fees of \$10,000 and \$20,000 payable to Mr. Keen during the years ended December 31, 2018 and 2017, respectively. In May 2018, the Company and Mr. Keen entered into an agreement, which terminated the consulting agreement.

Sterling Pharms Equipment Agreement

In May 2017, the Board approved a three-year equipment, demonstration and product testing agreement between the Company and Sterling Pharms, LLC ("Sterling"), an entity controlled by Mr. Keen, which operates a Colorado-licensed cannabis cultivation facility. Under this agreement, the Company agreed to provide to Sterling certain lighting, environmental control, and air sanitation equipment for use at the Sterling facility in exchange for a quarterly fee of \$16,500. Also, under this agreement, Sterling agreed to allow the Company and its existing and prospective customers to have access to the Sterling facility for demonstration tours in a working environment, which the Company believes will assist it in the sale of its products. Sterling also agreed to monitor, test and evaluate the Company's products installed at the Sterling facility and to collect data and provide feedback to the Company on the energy and operational efficiency and efficacy of the installed products, which the Company intends to use to improve, enhance and develop new or additional product features, innovations and technologies. In consideration for access to the Sterling facility to conduct demonstration tours and for the product testing and data to be provided by Sterling, the Company will pay Sterling a quarterly fee of \$12,000.

In March 2018, the Company and Sterling entered into an amendment of the original agreement to include additional leased equipment and to increase the quarterly fee payable to the Company to \$18,330. The amendment of the original agreement also provided that, upon expiration of the initial three-year term, either: (i) the leased equipment would be returned to the Company and the agreement would terminate, (ii) Sterling could purchase the leased equipment at the agreed upon residual value of \$81,827, or (iii) Sterling and the Company could agree to an extension of the original agreement at mutually agreed to quarterly payments to and from the parties.

After giving effect to the amended quarterly equipment lease fees received from Sterling of \$18,330 (the "Lease Fee") and the quarterly demonstration and testing fees paid to Sterling of \$12,000 (the "Demo and Testing Fee"), the Company will receive a net payment of \$6,330 from Sterling each quarter.

Sterling accepted delivery of the remaining leased equipment and completed installation of the equipment at its facility on May 1, 2018. Accordingly, the term of this agreement, which commenced upon complete installation of the equipment, commenced May 1, 2018 and will expire April 30, 2021.

The Company is treating the equipment rental arrangement and related Lease Fee payment as an operating lease. Accordingly, the equipment held for lease has been recorded as property and equipment on the balance sheets and is depreciated over the term of the lease. The Lease Fee is recorded as "Interest and other income, net" in the consolidated statements of operations. For the year ended December 31, 2018, the Company recorded Lease Fees of \$48,880. As of December 31, 2018, Lease Fees of \$36,660 were included in accounts receivable as of December 31, 2018.

The Company records the Demo and Testing Fee as operating expenses in the consolidated statements of operations. For the year ended December 31, 2018, the Company recorded Demo and Testing Fees of \$32,000. As of December 31, 2018, Demo and Testing Fees of \$24,000 were included in accounts payable as of December 31, 2018.

Brandy Keen Employment Agreement

In May 2018, the Company and Ms. Keen entered into, an amended and restated employment agreement, which will expire on April 30, 2020 and provides for an annualized base salary of \$150,000 and certain sales incentive.

Pursuant to the employment agreement, the Board approved an award of 4,800,000 restricted stock units ("RSUs") to Ms. Keen under the Company's 2017 Equity Incentive Plan, as may be modified and amended by the Company from time to time (the "2017 Equity Plan"), that vest as follows: (i) 1,000,000 RSUs vested on June 30, 2018, subject to her continued employment through the vesting date, (ii) 1,000,000 RSUs vested on December 31, 2018, subject to her continued employment through the vesting date, (iii) 1,000,000 RSUs will vest on June 30, 2019, subject to her continued employment through the vesting date, (iv) 1,000,000 RSUs will vest on December 31, 2019, subject to her continued employment through the vesting date, and (v) 800,000 RSUs will vest on April 30, 2020, subject to her continued employment through the vesting date. The employment agreement provides that the foregoing RSUs would continue to vest if Ms. Keen's employment is terminated by the Company without cause.

In connection with the employment agreement, Ms. Keen agreed to extend the post-termination restrictive period from one year to two years from the date of termination or expiration.

In connection with the foregoing transactions, Ms. Keen resigned as an executive officer and director of the Company effective May 10, 2018.

Company Purchase of Common Stock from Stephen and Brandy Keen

In May 2018, the Company and the Keens entered into a stock repurchase agreement, pursuant to which the Company agreed to repurchase from the Keens certain shares of the Company's common stock, subject to the closing of a private placement offering to accredited investors of the Company's common stock, which occurred during the second quarter of 2018. In June 2018, the Company closed the transaction under the stock repurchase agreement and repurchased 3,125,000 shares of the Company's common stock from the Keens for a total purchase price of \$400,000. See Note 13.

Company Purchase of Preferred Stock from Stephen and Brandy Keen

In May 2018, the Company and the Keens entered into a preferred stock option agreement under which the Company had the right, but not the obligation, to acquire all 35,189,669 shares of preferred stock owned by the Keens (the "Preferred Stock") on or before April 30, 2020. Pursuant to the preferred stock option agreement, upon exercise of the option by the Company, the Company agreed to issue one share of the Company's common stock for each 1,000 shares of Preferred Stock purchased by the Company. As consideration for the Keens' grant of the option, the Company paid them \$5,000. The Company exercised this option and, in December 2018, completed the repurchase by the Preferred Stock and issued 35,190 shares of the Company's common stock to the Keens. See Note 13.

Note 9 – Promissory Notes

On February 9, 2017, the Company entered into a securities purchase agreement with two accredited investors pursuant to which the Company issued promissory notes in the aggregate original principal amount of \$537,500. In addition, each investor received 125,000 shares, an aggregate of 250,000 shares, of the Company's common stock. The notes were unsecured, had an interest rate of 6%, per annum and were originally due and payable, with all accrued interest, on November 9, 2017. The total proceeds were approximately \$500,000 with an original issue discount of approximately \$37,500. The Company allocated the cash proceeds amount between the debt and shares issued on a relative fair value basis. Based on relative fair value, the Company allocated approximately \$461,000 and \$39,000 to the promissory notes and the shares of common stock, respectively. The original issue discount of \$37,500 and fair value of the shares issued of \$39,000 were amortized and expensed over the life of the loans.

On August 8, 2017, the Company executed an amendment (the "Amendment") with the holders of the promissory notes, each in the original principal amount of \$268,750. The Amendment provided for each of the holder's notes to convert its principal into 2,800,000 shares, or 5,600,000 shares in the aggregate, of the Company's common stock, at a price per share of approximately \$0.096. The Company's closing share price on August 7, 2017 was \$0.135. In connection with this Amendment, the holders also agreed to surrender to the Company the portion of the promissory notes representing the accrued interest as the consideration for this Amendment, which approximated \$15,900 in total. The transactions contemplated by the Amendment closed on August 22, 2017.

The Company has accounted for the Amendment as debt extinguishment whereby the difference between the reacquisition price of the debt and the net carrying amount of the extinguished debt was recognized as a loss during the year ended December 31, 2017. The following details the calculation of the loss on extinguishment of the notes payable:

Carrying amount of debt	
Principal converted	\$ 537,500
Accrued interest converted	15,904
Unamortized debt discount	(25,832)
Total carrying amount of debt	<u>527,572</u>
Reacquisition price of debt	
Fair value of shares of common stock issued	<u>756,000</u>
Loss on extinguishment of debt	<u>\$ (228,428)</u>

During the year ended December 31, 2017, the amortization expense related to the debt discount was \$49,997.

Note 10 – Convertible Notes

Series 2 Convertible Notes

In October 2014, the Company offered up to 60 investment units at a price per unit of \$50,000. Each unit consisted of (i) 250,000 shares of the Company's common stock, (ii) a \$50,000 10% convertible promissory note ("Series 2 Convertible Note"), and (iii) warrants for the purchase of 50,000 shares of the Company's common stock ("Series 2 Warrants"). The Series 2 Convertible Notes: (i) were unsecured, (ii) accrued interest at the rate of 10% per annum, and (iii) if not converted, were due and payable two years from the date of issuance. The Series 2 Convertible Notes were convertible after 360 days from the issuance date, at the investor's option, into a number of shares of the Company's common stock that was determined by dividing the amount to be converted by the \$0.60 conversion price. Additionally, the entire principal amount under the Series 2 Convertible Notes would be automatically converted into common stock at a conversion price equal to the greater of \$0.50 per share or 75% of the public offering price per share, without any action by the investor, on the earlier of: (x) the date on which the Company closed on a financing transaction involving the sale of the Company's common stock at a price of no less than \$2.00 per share with gross proceeds to the Company of no less than \$5,000,000, or (y) the date which is three days after the common stock traded at a volume-weighted-average-price ("VWAP") of at least \$2.00 per share for a period of 10 consecutive trading days. The Company raised \$2,536,250 from the sale of these investment units.

The gross proceeds from the sale of the Series 2 Convertible Notes were recorded net of a discount related to the conversion feature of the embedded conversion option and the fair value of the Series 2 Warrants, each of which were calculated pursuant to the Black-Scholes Model. The fair value of conversion feature and the Series 2 Warrants were recorded as a reduction to the Series 2 Convertible Notes payable and were charged to operations as interest expense in accordance with the effective interest method within the term of the Series 2 Convertible Notes. Transaction costs were apportioned to Series 2 Convertible Notes payable, common stock, Series 2 Warrants and derivative liabilities. The portion of transaction costs attributed to the conversion feature, warrants and common stock were immediately expensed, because the derivative liabilities are accounted for at fair value through the statement of operations.

During the year ended December 31, 2016 and the first quarter of 2017, the Company entered into note conversion and warrant amendment agreements (each, a "Conversion Agreement" and together, the "Conversion Agreements") to: (i) amend the Series 2 Convertible Notes to reduce the conversion price and simultaneously cause the conversion of the outstanding amount under such Series 2 Convertible Notes into shares of the Company's common stock, and (ii) reduce the exercise price of the Series 2 Warrants. Each Conversion Agreement was privately negotiated so the terms vary.

Pursuant to the Conversion Agreements, the Series 2 Convertible Notes were amended to reflect a reduced conversion price per share between \$0.09 and \$0.22. Additionally, pursuant to the Conversion Agreements, the Series 2 Warrants were amended to reflect a reduced exercise price per share between \$0.30 and \$0.35, except for one Series 2 Warrant to reflect a reduced exercise price of \$0.15 per share. The term of one Series 2 Warrant was also extended.

Pursuant to the Conversion Agreements, in the first quarter of 2017, the Company converted Series 2 Convertible Notes with an aggregate outstanding principal amount of \$510,000, together with accrued interest of \$134,553, in exchange for the issuance of 5,001,554 shares of the Company's common stock. The exercise price of the Series 2 Warrants related to these converted notes was also reduced.

In the first quarter of 2017, the Company also made payments of \$314,150 to settle Series 2 Convertible Notes in the principal amount of \$270,000, together with accrued interest of \$44,150. As of December 31, 2017, the Company had no Series 2 Convertible Notes outstanding.

The following table summarizes the Series 2 Convertible Note activity for the year ended December 31, 2017:

	Series 2 Convertible Notes
Balance January 1, 2017	\$ 780,000
Conversions	(510,000)
Repayments	(270,000)
Balance December 31, 2017	<u>\$ -</u>

Surna Inc.
Notes to Consolidated Financial Statements

The Company accounted for the Conversion Agreements as debt extinguishment whereby the difference between the reacquisition price of the debt and the net carrying amount of the extinguished debt was recognized as a loss. The following details the calculation of the loss on extinguishment of the Series 2 Convertible Notes for the year ended December 31, 2017:

	For the Year Ended December 31, 2017
Carrying amount of debt	
Principal converted	\$ 510,000
Accrued interest converted	134,553
Unamortized debt discount	(5,398)
Total carrying amount of debt	639,155
Reacquisition price of debt	
Fair value of shares of common stock issued	995,155
Warrant modification value	59,000
Total reacquisition price of debt	1,054,155
Loss on extinguishment of debt	\$ (415,000)

During the year ended December 31, 2017, the amortization expense related to the debt discount was \$13,160.

As of December 31, 2018, Series 2 Warrants to purchase 901,250 shares of common stock were outstanding, all of which expired unexercised in the first quarter of 2019.

Series 3 Convertible Notes

During the third quarter of 2015, the Company entered into Securities Purchase Agreements with three accredited investors (each a "Purchaser" and together the "Purchasers"), pursuant to which the Company sold and the Purchasers purchased convertible notes ("Series 3 Convertible Notes") with a one-year term in the aggregate original principal amount of \$711,000, with an aggregate original issue discount of \$61,000, together with Series 3 Warrants to purchase up to an aggregate of 2,625,000 shares of the Company's common stock, for aggregate cash proceeds of \$656,250. The Series 3 Convertible Notes accrued interest at a rate of 10% per annum, except for Series 3 Convertible Notes in the principal amount of \$106,000 which had an interest rate of 11% per annum. During the year ended December 31, 2016, the Company issued 15,598,870 shares of its common stock in connection with the conversion the Series 3 Convertible Notes in the principal amount of \$711,000 and accrued interest of \$72,128.

The Series 3 Warrants had a five-year term and an exercise price of \$0.25 per share, subject to adjustment. The Series 3 Warrants were exercisable on a cashless basis. The Series 3 Warrants also provide for a reduction in the exercise price in the event the Company issued common stock in a registered offering at a price below the exercise price. In such case, the exercise price under the warrants would be reduced to the price of the common stock in the registered offering. The Company determined that this exercise price reduction qualified as a derivative financial instrument. As of December 31, 2017, Series 3 Warrants to purchase 2,625,000 shares of common stock were outstanding. During the year ended December 31, 2018, the Company issued 1,168,540 shares of its restricted common stock upon the cashless exercise of the Series 3 Warrants.

Note 11 – Derivative Liabilities

The Company determined that the Series 3 Warrants qualified as derivative financial instruments. Accordingly, the Series 3 Warrants were derivative liabilities and were marked to market at the end of each reporting period. The change in fair value during the year ended December 31, 2018 was recorded as gain on change in derivative liabilities in the Company's consolidated statements of operations.

During the year ended December 31, 2018, all of the outstanding Series 3 Warrants were exercised on a cashless basis and the Company extinguished the derivative liability of approximately \$389,000 and recorded an increase in additional paid-in capital of the same amount. The gain on change in derivative liabilities presented in the statement of operations for the year ended December 31, 2018 represents the gain on derivatives through the date of the cashless exercise of the Warrants.

Surna Inc.
Notes to Consolidated Financial Statements

The following table sets forth movement in the derivative liability related to the Series 3 Warrants:

Balance January 1, 2017	\$ 477,814
(Gain) on change in derivative liability, net	(66,934)
Balance December 31, 2017	410,880
Gain on change in derivative liability, net	(21,403)
Balance prior to exercise of associated warrants	389,477
Extinguishment of derivative liability on cashless exercise of associated warrants	(389,477)
Balance December 31, 2018	\$ -

Note 12 – Commitments and Contingencies

Litigation

There are 6,750,000 restricted stock units that have not been settled due to the failure of the recipient to pay the required withholding taxes based on the value of the underlying shares at the time of vesting. The Company has commenced litigation against the recipient to have these restricted stock units canceled.

From time to time, in the normal course of its operations, the Company is subject to litigation matters and claims. Litigation can be expensive and disruptive to normal business operations. Moreover, the results of complex legal proceedings are difficult to predict and the Company's view of these matters may change in the future as the litigation and events related thereto unfold. The Company expenses legal fees as incurred. The Company records a liability for contingent losses when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. An unfavorable outcome to any legal matter, if material, could have an adverse effect on the Company's operations or its financial position, liquidity or results of operations.

Building Lease

The Company had a lease agreement for its manufacturing and office space consisting of approximately 18,000 square feet, which expired April 1, 2017. As the parties negotiated a new lease agreement in connection with the sale of the property to a new landlord, the parties extended this lease until September 29, 2017. On June 27, 2017, the Company executed a new lease, which commenced September 29, 2017 and continues through August 31, 2022. The Company occupied its 18,000 square foot space for \$12,967 per month until January 1, 2018. On January 2, 2018, the leased space was expanded and the monthly rental rate increased to \$18,979 until August 31, 2018. Beginning September 1, 2018, the monthly rent increased to \$19,549. On each September 1 through the end of the lease, the monthly rent will increase by 3%. Pursuant to the current lease, the Company made a security deposit of \$51,000 on July 31, 2017 and received a \$100,000 tenant allowance for leasehold improvements. Rent expense under the building leases amounted to \$239,107 and \$218,926 for the years ended December 31, 2018 and 2017, respectively.

The following is a schedule by years of the minimum future lease payments on the building lease as of December 31, 2018.

Year Ended December 31,	
2019	\$ 236,926
2020	244,034
2021	251,355
2022	170,888
Total future minimum lease payments	\$ 903,203

Total rent under the current building lease is charged to expense over the term of the lease on a straight-line basis, resulting in the same monthly rent expense throughout the lease. The difference between the rent expense amount and the actual rent paid is recorded to deferred rent on the Company's consolidated balance sheets.

Other Commitments

In the ordinary course of business, the Company may provide indemnifications of varying scope and terms to customers, vendors, lessors, business partners, and other parties with respect to certain matters, including, but not limited to, losses arising out of the Company's breach of such agreements, services to be provided by the Company, or from intellectual property infringement claims made by third parties. In addition, the Company has entered into indemnification agreements with its directors and certain of its officers and employees that will require the Company to, among other things, indemnify them against certain liabilities that may arise by reason of their status or service as directors, officers, or employees. The Company maintains director and officer insurance, which may cover certain liabilities arising from its obligation to indemnify its directors and certain of its officers and employees, and former officers, directors, and employees of acquired companies, in certain circumstances.

Note 13 – Preferred and Common Stock

Preferred Stock

On May 29, 2018, the Company acquired an option to purchase 35,189,669 shares of preferred stock owned by the Keens. The Company paid the Keens \$5,000 for this option. The Company exercised this option and, in December 2018, completed the repurchase by these shares of preferred stock and issued 35,190 shares of the Company's common stock to the Keens. The Company recorded the purchase price for the repurchased shares as a reduction to preferred stock at par value with the remainder of the purchase price reflected as an increase to accumulated deficit.

As of December 31, 2018 and 2017, there were 42,030,331 and 77,220,000 shares of Series A preferred stock, par value \$0.00001 per share, issued and outstanding. The holders of Series A preferred stock have one vote per share of Series A preferred stock equivalent to one vote of the Company's common stock. The Series A preferred stock ranks senior to the Company's common stock. The holders of shares of Series A Preferred Stock are not entitled to receive dividends and have no conversion or preemptive rights. Upon liquidation, dissolution or winding up of the Company's business, after payment to the holders of any senior securities, the holders of Series A preferred stock are entitled to receive a preferential cash payment per share of Series A preferred stock equal to the stated value of the preferred stock, prior to any payment to the holders of common stock.

Common Stock

During the year ended December 31, 2018, the Company issued shares of its restricted common stock as follows:

- 100,000 shares upon the exercise of certain warrants by an investor and payment of the exercise price of \$15,000;
- 1,498,325 shares upon the exercise of certain warrants by a former director on a cashless exercise basis;
- 1,168,540 shares upon exercise of certain warrants by investors on a cashless exercise basis;
- 800,000 shares in connection with the settlement of a commercial dispute;
- 273,675 shares to consultants as compensation for services rendered;
- 31,562 shares to certain employees under a sales incentive plan;
- 7,562,500 shares of common stock were issued to accredited investors in a unit offering completed in June 2018 (see Note 14); and
- 35,190 shares of common stock were issued to the Keens in December 2018 in connection with the Company's exercise of the preferred stock option (see Note 8).

During the year ended December 31, 2017, the Company issued restricted shares of its common stock as follows:

- 5,001,554 shares of common stock were issued upon conversion of Series 2 Convertible Notes with a principal amount of \$510,000, together with accrued interest (see Note 10);
- 40,000 shares of common stock were issued to an employee as compensation;
- 250,000 shares of common stock were issued to two investors in connection with the Company's issuance of certain promissory notes;
- 16,781,250 shares of common stock were issued to accredited investors in a unit offering completed in March 2017 (see Note 14);
- 5,600,000 shares of common stock were issued to two investors upon conversion of certain promissory notes (see Note 9);
- 700,000 shares of common stock were issued to an independent director as an equity retention payment; and
- 14,734,000 shares of common stock were issued to accredited investors in a unit offering completed in December 2017 (see Note 14).

During the year ended December 31, 2018, the Company also issued shares of its common stock under the 2017 Equity Plan as follows:

- 345,454 shares of common stock were issued to independent directors in lieu of cash director fees;
- 5,447,368 shares of common stock were issued to certain employees and independent directors in settlement of vested restricted stock units;
- 3,420,000 shares of common stock were issued to certain employees as a stock incentive bonus;
- 1,158,658 shares of common stock were issued to a consultant as compensation for services rendered in lieu of cash fees and a bonus fee; and
- 25,000 shares of common stock were issued to a former employee upon exercise of certain non-qualified stock options.

During the year ended December 31, 2017, the Company also issued shares of its common stock under the 2017 Equity Plan as follows:

- 216,009 shares of common stock were issued to independent directors in lieu of cash director fees;
- 600,000 shares of common stock were issued to a director as compensation for services prior to becoming a director;
- 1,200,000 shares of common stock were issued to an employee in connection with the execution of an employment agreement with the Company;
- 200,000 shares of common stock were issued to a consultant in settlement of vested restricted stock units; and
- 404,485 shares of common stock were issued to a consultant as compensation for services rendered in lieu of cash fees.

In June 2018, the Company repurchased 3,125,000 shares of the Company's common stock from the Keens for a repurchase price of \$400,000. See Note 8. Following the repurchase, the Company retired these shares and returned them to unissued and unissued shares. The Company recorded the purchase price for the repurchased shares as a reduction to common stock at par value with the remainder of the purchase price reflected as an increase to accumulated deficit.

Note 14 – Unit Offerings

In March 2017, the Company entered into a securities purchase agreement with certain accredited investors. The Company issued an aggregate of 16,781,250 investment units, for aggregate gross proceeds of \$2,685,000, or \$0.16 per unit. Each unit consisted of one share of the Company's common stock and one warrant for the purchase of one share of the Company's common stock ("Q1 2017 Warrants"); however, one investor declined receipt of the warrant to purchase 468,750 shares of the Company's common stock.

Pursuant to the Q1 2017 Warrants, the holder thereof may at any time on or after six months after the issuance date and on or prior to the close of business on the date that is the third anniversary of the issuance date, purchase up to the number of shares of the Company's common stock as set forth in the respective warrant. The exercise price per share of the common stock under the Q1 2017 Warrants is \$0.26, subject to customary adjustments as provided in the warrant. Each Q1 2017 Warrant is callable at the Company's option commencing six months from the issuance date, provided the closing price of the Company's common stock is \$0.42 or greater for five consecutive trading days. Commencing at any time after the date on which such call condition is satisfied, the Company has the right, upon 30 days' notice to the holder, to redeem the warrant shares at a price of \$0.01 per warrant share. The holder may exercise the warrant at any time (in whole or in part) prior to the redemption date at the exercise price.

In December 2017, the Company completed a private placement offering of investment units, at a price of \$0.12 per unit, with certain accredited investors. Each unit consisted of one share of the Company's common stock and one warrant for the purchase of one share of the Company's common stock ("Q4 2017 Warrants"). The Company issued a total of 14,734,000 units for aggregate proceeds of \$1,768,080.

The Q4 2017 Warrants have an exercise price of \$0.20 per share, subject to customary adjustments as provided in the warrant, and have a term of three years. The Q4 2017 Warrants are callable at the Company's option, provided the closing price of the Company's common stock is \$0.36 or greater for five consecutive trading days. Commencing at any time after the date on which the call condition is satisfied, the Company has the right, upon notice to the holders, to redeem the shares of common stock underlying each warrant at a price of \$0.01 per share, but such redemption may not occur earlier than sixty-one (61) days following the date of the receipt of notice by the holder. The holder may exercise the warrant at any time (in whole or in part) prior to the redemption date at the exercise price. The call condition with respect to the Q4 2017 Warrants was satisfied on January 29, 2018, however, the Company has not elected to call such warrants.

In June 2018, the Company completed a private placement offering of investment units, at a price of \$0.16 per unit, with certain accredited investors. Each unit consisted of one share of the Company's common stock and one warrant for the purchase of one share of the Company's common stock (the "Q2 2018 Warrants"). The Company issued a total of 7,562,500 units for aggregate proceeds of \$1,210,000, with \$400,000 from the proceeds used to repurchase shares of common stock from the Keens.

The Q2 2018 Warrants have an exercise price of \$0.25 per share of the common stock underlying each warrant, subject to customary adjustments as provided in the warrant. The Q2 2018 Warrants are exercisable commencing July 1, 2018 until June 30, 2021. The Q2 2018 Warrants are callable at the Company's option, beginning on July 1, 2019 until the expiration thereof on June 30, 2021, provided the closing price of the Company's common stock is \$0.40 (subject to adjustment as provided in the warrant) or greater for five consecutive trading days. Commencing at any time after the date on which the call condition is satisfied, the Company has the right, upon notice to the holders, to redeem the shares of common stock underlying each warrant at a price of \$0.01 per share, but such redemption may not occur earlier than sixty-one (61) days following the date of the receipt of notice by the holder. The holder may exercise the warrant (in whole or in part) prior to the redemption date at the exercise price.

As of December 31, 2018, Q1 2017 Warrants to purchase 16,312,500 shares of common stock, the Q4 2017 Warrants to purchase 14,734,000 shares of common stock and the Q2 2018 Warrants to purchase 7,562,500 shares of common stock are outstanding.

Note 15 – Warrants Issued as Compensation for Services

Warrants Issued to Former Director

Pursuant to certain letter agreements, and in connection with the resignation of a former director, the Company agreed to issue the former director three individual warrants to purchase: (i) 900,000 shares ("Warrant 1"), (ii) 460,525 shares ("Warrant 2"), and (iii) 460,525 shares ("Warrant 3") (collectively, the "Warrants") of the Company's common stock for a period of five years. Warrant 1 was granted on June 20, 2017, is fully vested, and can be exercised beginning December 21, 2017 at an exercise price of \$0.114 per share with the option for a cashless exercise. Warrants 2 and 3 were granted on June 20, 2017, are fully vested, and can be exercised beginning December 21, 2017 at an exercise price of \$0.0005 per share with the option for a cashless exercise. The Company recorded \$189,592 of compensation expense for the fair value of the Warrants on the grant date. The fair value of the Warrants at the date of grant was determined using the Black-Scholes Model. The assumptions used in the Black-Scholes Model were the term of the Warrants of 5 years, volatility rate of 119.96%, quarterly dividends 0%, and a risk-free interest rate of 1.77%. The former director exercised the Warrants on a cashless basis during 2018.

Warrants Issued to Investment Bank

Pursuant to a certain agreement for services rendered in connection with the conversion of the Series 2 Convertible Notes, during the year ended December 31, 2017, the Company issued to an investment bank or its designees a warrant ("Banker Warrant") to purchase, at an exercise price \$0.35 per share, 500,000 shares of the Company's common stock for a period of three years. The Banker Warrants were fully vested on the date of issuance and may be exercised beginning December 20, 2017. The Company recorded \$30,687 of expense for the fair value of the Banker Warrant on the date of issuance. The fair value of the Banker Warrants at date of issuance was determined using the Black-Scholes Model. The assumptions used in the Black-Scholes Model were term of the Banker Warrant of 3 years, volatility rate of 120.02%, rate of quarterly dividends 0% and a risk-free interest rate of 1.52%. As of December 31, 2018, the Banker Warrant is outstanding.

Note 16 – Equity Incentive Plans

2014 Stock Ownership Plan

As of December 31, 2016, the Company had non-qualified stock options to purchase 6,177,600 shares of the Company's common stock, with an exercise price of \$0.00024, outstanding under the 2014 Stock Ownership Plan of Safari Resource Group, Inc. (the "2014 Stock Plan"). Upon the adoption of the Company's 2017 Equity Incentive Plan (the "2017 Equity Plan"), there will be no further awards under the 2014 Stock Plan.

In March 2017, in a private transaction, certain principal shareholders of the Company, assigned to a former executive officer, non-qualified stock options to purchase 3,088,800 shares of the Company's common stock outstanding under the 2014 Stock Plan. The principal shareholders informed the Company that they agreed to assign these options as an incentive (i) for the former executive officer to complete the negotiations with the Company's convertible noteholders to convert their notes into shares of the Company's common stock, and (ii) for the former executive officer to complete a private placement of the Company's common stock. The former executive officer thereupon delivered a purported notice of exercise of the options to the Company just prior to the expiration of the options. Prior to the Company's acceptance of the notice of exercise and issuances of these shares in response thereto, in May 2017, the former executive officer and the principal shareholders entered into a rescission agreement to nullify the March 2017 assignment transaction. Pursuant to their terms, these options have expired.

In March 2017, another former executive officer of the Company, holding non-qualified options to 3,088,800 shares of the Company's common stock outstanding under the 2014 Stock Plan, requested to exercise options with respect to 3,000,000 shares at an exercise price of \$0.00024 per share. The Board did not approve the request for the issuance of the common stock underlying these exercised options and, as a result, the Company has treated these options as expired.

As of December 31, 2018 and 2017, there are no options outstanding under the 2014 Stock Plan.

The following table summarizes certain details regarding the options under the 2014 Stock Plan are set forth in the table below:

	Number of Options	Weighted- Average Exercise Price	Weighted- Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value of Outstanding Options
Outstanding, January 1, 2017	6,177,600	\$ 0.00024	0.2	\$ 1,155,211
Granted	-	-	-	-
Exercised	-	-	-	-
Forfeited	-	-	-	-
Expired	(6,177,600)	\$ 0.00024	-	-
Outstanding, December 31, 2017	-	-	-	-
Vested and exercisable, December 31, 2017	-	-	-	-

2017 Equity Incentive Plan

On August 1, 2017, the Board adopted and approved the 2017 Equity Plan in order to attract, motivate, retain, and reward high-quality executives and other employees, officers, directors, consultants, and other persons who provide services to the Company by enabling such persons to acquire an equity interest in the Company. Under the 2017 Equity Plan, the Board (or the compensation committee of the Board, if one is established) may award stock options, stock appreciation rights ("SARs"), restricted stock awards ("RSAs"), restricted stock unit awards ("RSUs"), shares granted as a bonus or in lieu of another award, and other stock-based performance awards. The 2017 Equity Plan allocates 50,000,000 shares of the Company's common stock ("Plan Shares") for issuance of equity awards under the 2017 Equity Plan. As of December 31, 2018, the Company has granted, under the 2017 Equity Plan, awards in the form of RSAs for services rendered by independent directors and consultants, non-qualified stock options, RSUs and stock bonus awards.

The total unrecognized compensation expense for unvested non-qualified stock options, RSUs and stock bonus awards at December 31, 2018 was \$702,169, which will be recognized over approximately 2.0 years. This unrecognized compensation expense does not include the potential future compensation expense related to non-qualified stock options which are subject to vesting based on certain revenue thresholds for 2019 being satisfied (the "Performance-based Awards"). As of December 31, 2018 and the grant date, the Company has determined that the likelihood of performance levels being obtained is remote. The unrecognized compensation expense with respect to these Performance-based Awards at December 31, 2018 was \$245,553.

Restricted Stock Awards

During the year ended December 31, 2017, the Company awarded 2,420,494 shares of restricted stock under the 2017 Equity Plan in consideration of services rendered to the Company by certain employees, independent directors and consultants. These restricted shares were fully vested at the time of the award and the aggregate value attributable to these shares was \$304,035, as calculated using the fair value of the Company's common stock on date the Board approved these awards. As of December 31, 2017, the independent directors and a consultant were owed cash fees of \$27,750 which were paid in the form of fully vested restricted shares in February 2018.

During the year ended December 31, 2018, the Company awarded 1,406,055 shares of restricted stock under the 2017 Equity Plan in consideration of services rendered to the Company by certain independent directors and consultants. These restricted shares were fully vested at the time of the award and the aggregate value attributable to these shares was \$301,650, as calculated using the fair value of the Company's common stock on date the Board approved these awards. As of December 31, 2018, the independent directors were owed cash fees of \$15,000 which were paid in the form of fully vested restricted shares in January 2019.

Non-Qualified Stock Options

The Company uses the Black-Scholes Model to determine the fair value of options granted. Option-pricing models require the input of highly subjective assumptions, particularly for the expected stock price volatility and the expected term of options. Changes in the subjective input assumptions can materially affect the fair value estimate. The expected stock price volatility assumptions are based on the historical volatility of the Company's common stock over periods that are similar to the expected terms of grants and other relevant factors. The Company derives the expected term based on an average of the contract term and the vesting period taking into consideration the vesting schedules and future employee behavior with regard to option exercise. The risk-free interest rate is based on U.S. Treasury yields for a maturity approximating the expected term calculated at the date of grant. The Company has never paid any cash dividends on its common stock and the Company has no intention to pay a dividend at this time; therefore, the Company assumes that no dividends will be paid over the expected terms of option awards.

The Company determines the assumptions used in the valuation of option awards as of the date of grant. Differences in the expected stock price volatility, expected term or risk-free interest rate may necessitate distinct valuation assumptions at those grant dates. As such, the Company may use different assumptions for options granted throughout the year. The valuation assumptions used to determine the fair value of each option award on the date of grant were: expected stock price volatility 114.32% - 118.90%; expected term in years 1.5 - 7.5 and risk-free interest rate 1.32% - 2.87%.

Surna Inc.
Notes to Consolidated Financial Statements

A summary of the non-qualified stock options granted to employees under the 2017 Equity Plan during the years ended December 31, 2018 and 2017 are presented in the table below:

	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding, December 31, 2016	-			
Granted	12,530,000	\$ 0.121		
Exercised	-	-		
Forfeited	(2,235,000)	\$ 0.122		
Expired	(60,000)	\$ 0.135		
Outstanding, December 31, 2017	10,235,000	\$ 0.121	8.7	\$ 1,218,375
Granted	6,500,000	\$ 0.118		
Exercised	(25,000)	\$ 0.135		
Forfeited	(6,083,332)	\$ 0.147		
Expired	(66,668)	\$ 0.135		
Outstanding, December 31, 2018	10,560,000	\$ 0.104	8.4	\$ -
Exercisable, December 31, 2018	3,226,671	\$ 0.114	6.1	\$ -
Outstanding vested and expected to vest, December 31, 2018	8,160,000	\$ 0.101	8.3	\$ -
Performance options based on 2019 revenue thresholds - uncertain vesting as of December 31, 2018	2,400,000	\$ 0.116	8.7	\$ -

A summary of non-vested non-qualified stock options activity for employees under the 2017 Equity Plan for the years ended December 31, 2018 and 2017 are presented in the table below:

	Number of Options	Weighted Average Grant- Date Fair Value	Aggregate Intrinsic Value	Grant-Date Fair Value
Nonvested, December 31, 2016	-			
Granted	12,530,000	\$ 0.103		\$ 1,296,504
Vested	(1,885,008)	\$ 0.082		\$ 153,981
Forfeited	(2,235,000)	\$ 0.109		\$ 243,359
Expired	(60,000)	\$ 0.122		\$ 7,310
Nonvested, December 31, 2017	8,349,992	\$ 0.107	\$ 1,000,499	\$ 891,855
Granted	6,500,000	\$ 0.102		\$ 663,569
Vested	(1,433,331)	\$ 0.088		\$ 125,988
Forfeited	(6,083,332)	\$ 0.132		\$ 800,680
Expired	-	-		\$ -
Nonvested, December 31, 2018	7,333,329	\$ 0.086	\$ -	\$ 628,756

For the years ended December 31, 2018 and 2017, the Company recorded \$148,013 and \$189,536 as compensation expense related to vested options issued to employees, net of forfeitures, respectively. As of December 31, 2018, total unrecognized share-based compensation related to unvested options was \$578,486, of which \$332,933 was related to time-based vesting and \$245,553 was related to performance-based vesting.

As of December 31, 2018, the Company had granted non-qualified options to purchase 10,250,000 shares which were performance-based. At December 31, 2018, non-qualified options to purchase 3,600,000 shares were forfeited due to the failure to satisfy the 2017 and 2018 revenue-based performance thresholds and 4,250,000 shares were forfeited due to employee terminations. Of the remaining non-qualified options to purchase 2,400,000 shares which are performance-based, the Company has determined that the likelihood of the performance thresholds being satisfied is remote as of the date of grant and December 31, 2018; therefore, no expense was recognized.

Surna Inc.
Notes to Consolidated Financial Statements

A summary of the non-qualified stock options granted to directors under the 2017 Equity Plan during the years ended December 31, 2018 and 2017 are presented in the table below:

	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value (\$000)
Outstanding, December 31, 2016	-	-		
Granted	1,800,000	\$ 0.135		
Exercised	-	-		
Forfeited/Cancelled	(900,000)	\$ 0.135		
Expired	-	-		
Outstanding, December 31, 2017	900,000	\$ 0.135	9.6	\$ 94,500
Granted	-	-		
Exercised	-	-		
Forfeited/Cancelled	-	-		
Expired	-	-		
Outstanding, December 31, 2018	900,000	\$ 0.135	8.6	\$ -
Exerciseable, December 31, 2018	900,000	\$ 0.135	8.6	\$ -

A summary of non-vested non-qualified stock options activity for directors under the 2017 Equity Plan for the years ended December 31, 2018 and 2017 are presented in the table below:

	Number of Options	Weighted Average Grant-Date Fair Value	Aggregate Intrinsic Value
Nonvested, December 31, 2016	-		
Granted	1,800,000	\$ 0.123	
Vested	(450,000)	\$ 0.123	
Forfeited	(900,000)	\$ 0.123	
Expired	-	-	
Nonvested, December 31, 2017	450,000	\$ 0.123	\$ 52,470
Granted	-	-	
Vested	(450,000)	\$ 0.123	
Forfeited	-	-	
Expired	-	-	
Nonvested, December 31, 2018	-	-	\$ -

For the years ended December 31, 2018 and 2017, the Company recorded \$12,205 and \$166,187 as compensation expense related to vested options issued to directors, respectively. As of December 31, 2018, there was no unrecognized share-based compensation related to unvested options issued to directors.

Surna Inc.
Notes to Consolidated Financial Statements

Restricted Stock Units

A summary of the RSUs awarded to employees, directors and consultants under the 2017 Equity Plan during the years ended December 31, 2018 and 2017 are presented in the table below:

	<u>Number of Units</u>	<u>Weighted Average Grant- Date Fair Value</u>	<u>Aggregate Intrinsic Value</u>
Outstanding, December 31, 2016	-		
Granted	14,000,000	\$ 0.122	
Vested and settled with share issuance	(200,000)	\$ 0.103	
Forfeited	-		
Outstanding, December 31, 2017	13,800,000	\$ 0.122	\$ 3,312,000
Granted	5,514,736	\$ 0.185	
Vested and settled with share issuance ¹	(6,447,368)	\$ 0.153	
Forfeited	(3,000,000)	\$ 0.112	
Outstanding, December 31, 2018	9,867,368	\$ 0.140	\$ 730,185
Vested but not settled as of December 31, 2018 ²	6,750,000	\$ 0.121	\$ 499,500
Expected to vest as of December 31, 2018	3,117,368	\$ 0.181	\$ 230,685

¹Includes 1,000,000 RSUs that were vested as of December 31, 2018 and settled with the issuance of 1,000,000 shares of common stock in January 2019.

²These RSUs have not been settled due to the failure of the recipient to pay the required withholding taxes based on the value of the underlying shares at the time of vesting. The Company has commenced litigation against the recipient to have these RSUs canceled.

For the years ended December 31, 2018 and 2017, the Company recorded \$1,295,368 and \$765,055 as compensation expense related to vested RSUs issued to employees, directors and consultants. As of December 31, 2018, total unrecognized share-based compensation related to unvested RSUs was \$325,027, all of which was related to time-based vesting. The total intrinsic value of RSUs vested and settled with share issuance was \$1,289,500 and \$20,499 for the years ended December 31, 2018 and 2017, excluding the intrinsic value of \$1,035,750 related to RSUs, which the Company is seeking to cancel, that vested in 2018 but have not been settled due to the recipient's failure to pay required withholding taxes.

During 2018, 3,000,000 RSUs granted to a former executive officer and subject to performance-based vesting were forfeited due to termination of employment. The Company had not recognized any expense related to these RSUs prior to forfeiture since the likelihood of the performance thresholds being satisfied was determined to be remote.

Incentive Stock Bonuses

The Company has entered into certain "at-will" employment agreements with certain employees. Under these agreements, the employees are eligible to receive special incentive stock bonuses, provided the Board has determined, in its sole discretion, that the employee's performance has been average or better for the applicable special bonus period. This special stock incentive bonus is payable only if the employee continues in the employment of the Company.

For accounting purposes, the Company treats these special incentive stock bonuses as vesting over each bonus's service period based on the fair value of the award at the time of grant. Even though these bonuses are subject to Board approval, the awards are vested over each service period because it is more likely than not that the Board will approve the award based on the "average or better" employee performance standard. Since the awards are denominated in shares of common stock, the fair value of the vested bonus is charged to additional paid-in capital.

Surna Inc.
Notes to Consolidated Financial Statements

A summary of the incentive stock bonus awards granted to employees under the 2017 Equity Plan during the years ended December 31, 2018 and 2017 are presented in the table below:

	Number of Shares	Weighted Average Grant-Date Fair Value	Aggregate Intrinsic Value
Unvested, December 31, 2016	-	\$ -	
Awarded	8,600,000	\$ 0.113	
Vested	(1,560,000)	\$ 0.113	
Forfeited	-		
Unvested, December 31, 2017	7,040,000	\$ 0.113	\$ 1,689,600
Awarded	4,000,000	\$ 0.170	
Vested	(1,860,000)	\$ 0.113	
Forfeited	(7,500,000)	\$ 0.144	
Unvested, December 31, 2018	1,680,000	\$ 0.112	\$ 124,320

For the years ended December 31, 2018 and 2017, the Company recorded \$165,208 and \$364,483 as compensation expense related to vested stock bonus awards issued to employees, net of forfeitures of \$404,689 and \$0, respectively. As of December 31, 2018, total unrecognized share-based compensation related to unvested stock bonus awards was \$44,209. During the year ended December 31, 2018, the Company issued 3,420,000 shares in payment of the vested stock bonus awards approved by the Board which had a total intrinsic value of \$624,520. Subsequent to December 31, 2018, the Company issued 560,000 shares in payment of the vested stock bonus awards approved by the Board which had a total intrinsic value of \$42,560. See Note 18.

Note 17 – Income Taxes

On December 22, 2017, the Tax Cuts and Jobs Act was enacted into law. This U.S. tax reform contains several key provisions including the reduction of the U.S. federal corporate income tax rate to 21% effective January 1, 2018 as well as a variety of other changes including the limitation of the tax deductibility of interest expense, acceleration of expensing of certain business assets, and reductions in the amount of executive pay that could qualify as a tax deduction. As a result of the change in the corporate tax rate, the Company remeasured its deferred tax assets as of December 31, 2017 based on the rate at which they are expected to reverse in the future, and recorded a reduction in net deferred tax assets of \$1,177,000 in the fourth quarter of 2017, which is fully offset by the corresponding reduction in the valuation allowance of the same amount.

For financial reporting purposes, the provision for income taxes consisted of the following components:

	2018	2017
Current taxes:		
U.S. Federal	\$ -	\$ -
U.S. State	-	-
International	-	-
Current taxes	-	-
Deferred taxes:		
U.S. Federal	-	-
U.S. State	-	-
International	-	-
Deferred taxes	-	-
Provision for income taxes, net	\$ -	\$ -

Surna Inc.
Notes to Consolidated Financial Statements

The differences between income taxes expected at the U.S. federal statutory income tax rate and the reported provision for income taxes are summarized as follows:

	2018	2017
Expected income tax benefit at the federal statutory rate	\$ (996,000)	\$ (1,535,000)
State taxes, net of federal benefits	(187,000)	(109,000)
Permanent differences	105,000	225,000
Tax return to provision true-up adjustments	49,000	-
Adjustment to net operating loss	(87,000)	-
Other, net	(1,000)	(8,000)
Change due to U.S. tax reform	-	1,177,000
Change in valuation allowance	1,117,000	250,000
Reported income tax (benefit) expense	\$ -	\$ -

The components of the net deferred tax assets as of December 31, 2018 and 2017 are as follows:

	2018	2017
Deferred tax assets:		
Net operating losses	\$ 3,899,000	\$ 2,706,000
Equity compensation	321,000	274,000
Other deferred tax assets	188,000	263,000
Total deferred tax assets	4,408,000	3,243,000
Deferred tax liabilities:		
Other deferred tax liabilities	(48,000)	-
Total deferred tax liabilities	(48,000)	-
Net deferred tax assets before valuation allowance	4,360,000	3,243,000
Less valuation allowance	(4,360,000)	(3,243,000)
Net deferred tax assets	\$ -	\$ -

As of December 31, 2018, the Company has U.S. federal and state net operating losses ("NOLs") of approximately \$15,626,000, which will expire, if not utilized, in the years 2034 through 2037, however, NOLs generated subsequent to December 31, 2017 do not expire but may only be used against taxable income to 80%. Pursuant to Section 382 of the Internal Revenue Code of 1986, as amended, use of the Company's NOLs carryforwards may be limited in the event of cumulative changes in ownership of more than 50% within a three-year period.

The Company must assess the likelihood that its net deferred tax assets will be recovered from future taxable income, and to the extent the Company believes that recovery is not likely, the Company establishes a valuation allowance. Management's judgment is required in determining the Company's provision for income taxes, deferred tax assets and liabilities, and any valuation allowance recorded against the net deferred tax assets. The Company recorded a full valuation allowance as of December 31, 2018 and 2017. Based on the available evidence, the Company believes it is more likely than not that it will not be able to utilize its net deferred tax assets in the foreseeable future. The Company intends to maintain valuation allowances until sufficient evidence exists to support the reversal of such valuation allowances. The Company makes estimates and judgments about its future taxable income that are based on assumptions that are consistent with the Company's plans. Should the actual amounts differ from the Company's estimates, the carrying value of the Company's deferred tax assets could be materially impacted.

The Company is subject to examination by the IRS for the calendar year 2009 and thereafter. These examinations may lead to ordinary course adjustments or proposed adjustments to the Company's taxes or the Company's net operating losses with respect to years under examination as well as subsequent periods. The Company has filed its U.S. federal corporate income tax returns from 2009 through 2017, although the returns for the years 2009 through 2015 were not timely filed. Accordingly, the Company may be subject to penalties, including those described below, for non-compliance; however, the Company believes that it had no taxable income in the U.S. or in any foreign jurisdiction for the years 2009 through 2017. The Company has filed Colorado state income tax returns for years 2014 through 2017, and Alaska, California and Connecticut state income tax returns for the year 2017.

The Company recognizes in its consolidated financial statements the impact of a tax position, if that position is more likely than not of being sustained on audit, based on the technical merits of the position. The Company's policy is to recognize interest and penalties accrued on any unrecognized tax benefits as a component of operating expense. The Company does not believe there are any tax positions for which it is reasonably possible that the total amounts of unrecognized tax benefits will significantly increase or decrease within twelve months of the reporting date. There were no penalties or interest liabilities accrued as of December 31, 2018 or 2017, nor were any penalties or interest costs included in expense for the years ended December 31, 2018 and 2017.

Note 18 – Subsequent Events

In accordance with ASC 855, *Subsequent Events*, the Company has evaluated all subsequent events through March 19, 2019, the date the financial statements were available to be issued. The following events occurred after December 31, 2018.

Since December 31, 2018, the Company issued shares of its common stock under the 2017 Equity Plan as follows:

- 197,370 shares of common stock to independent directors in lieu of cash director fees of \$15,000 related to the fourth quarter of 2018;
- 789,474 shares of common stock to independent directors for 2019 director fees of \$60,000 payable in equity;
- 1,000,000 shares to an employee in settlement of certain RSUs that vested in 2018;
- 560,000 shares pursuant to a special incentive stock bonus approved the Board for the period ended December 31, 2018.

In January 2019, the Company granted to a consultant the following non-qualified stock options with an exercise price of \$0.0795 per share: (i) 1,000,000 options which vested on the date of grant, and (ii) 1,000,000 options which vest on June 30, 2019, subject to the consultant's continued service through the vesting date.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

SURNA INC.
(the "Registrant")

Dated: March 19, 2019

By: /s/ Anthony K. McDonald
Anthony K. McDonald
Chief Executive Officer and President
(Principal Executive Officer)

Dated: March 19, 2019

By: /s/ Anthony K. McDonald
Anthony K. McDonald
Principal Financial and Accounting Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Dated: March 19, 2019

By: /s/ Anthony K. McDonald
Anthony K. McDonald, Director

Dated: March 19, 2019

By: /s/ Timothy J. Keating
Timothy J. Keating, Chairman of the Board

Dated: March 19, 2019

By: /s/ J. Taylor Simonton
J. Taylor Simonton, Director

EXHIBITS

Exhibit Number	Description of Exhibit
3.1(a)	<u>Articles of Incorporation (incorporated herein by reference to Exhibit 3.1 to the Registration Statement on Form S-1 as filed on January 28, 2010).</u>
3.1(b)	<u>Amendment to Articles of Incorporation (incorporated herein by reference to Exhibit 3.1(b) to the Annual Report on Form 10-K filed April 2, 2018).</u>
3.1(c)	<u>Certificate of Designations of Preferences, Rights, and Limitations of Preferred Stock (incorporated herein by reference to Exhibit 3.2 to the Current Report on Form 8-K as filed on May 12, 2014).</u>
3.2	<u>Bylaws, as amended (incorporated herein by reference to Exhibit 3.2 to the Annual Report on Form 10-K filed April 2, 2018).</u>
4.1	<u>Specimen Stock Certificate (incorporated herein by reference to Exhibit 4.1 to the Registration Statement on Form S-1 filed on January 28, 2010).</u>
4.2	<u>Form of Common Stock Warrant issued with Convertible Notes (incorporated herein by reference to Exhibit 4.2 to the Annual Report on Form 10-K filed April 2, 2018).</u>
4.3	<u>Form of Note Conversion and Warrant Amendment Agreement (incorporated herein by reference to Exhibit 10.15 to the Annual Report on Form 10-K filed March 31, 2017).</u>
4.4	<u>Form of Common Stock Warrant issued in Q1 2017 Unit Offering (incorporated herein by reference to Exhibit 4.4 to the Annual Report on Form 10-K filed April 2, 2018).</u>
4.5	<u>Form of Common Stock Warrant issued in Q4 2017 Unit Offering (incorporated herein by reference to Exhibit 4.5 to the Annual Report on Form 10-K filed April 2, 2018).</u>
4.6	<u>Form of Common Stock Warrant issued in Q2 2018 Unit Offering (incorporated herein by reference to Exhibit 4.2 to the Current Report on Form 8-K filed June 12, 2018).</u>
10.1+	<u>Executive Employment Agreement between the Company and Anthony K. McDonald dated effective November 28, 2018 (incorporated herein by reference to Exhibit 10.1 to the Current Report on Form 8-K filed November 28, 2018).</u>
10.2+	<u>Employment Agreement by and between the Company and Brandy M. Keen dated May 29, 2018 (incorporated herein by reference to Exhibit 10.1 to the Current Report on Form 8-K filed May 31, 2018).</u>
10.3+	<u>Board of Directors Agreement between Surna Inc. and Timothy J. Keating dated March 7, 2017 (incorporated herein by reference to Exhibit 10.18 to the Annual Report on Form 10-K filed March 31, 2017).</u>
10.4+	<u>Surna Inc. 2017 Equity Incentive Plan (incorporated herein by reference to Exhibit 99.1 to the Registration Statement on Form S-8 filed on August 3, 2017).</u>
10.5	<u>Purchase Agreement between Surna Inc. and Sante Veritas Therapeutics Inc. dated February 21, 2017 (incorporated herein by reference to Exhibit 10.16 to the Annual Report on Form 10-K filed March 31, 2017).</u>
10.6	<u>Stock Repurchase Agreement by and among the Company, Brandy M. Keen and Stephen B. Keen dated May 29, 2018 (incorporated herein by reference to Exhibit 10.2 to the Current Report on Form 8-K filed May 31, 2018).</u>
10.7	<u>Preferred Stock Option Agreement by and among the Company, Brandy M. Keen and Stephen B. Keen dated May 29, 2018 (incorporated herein by reference to Exhibit 10.3 to the Current Report on Form 8-K filed May 31, 2018).</u>
14.1	<u>Code of Business Code and Ethics adopted February 13, 2018 (incorporated herein by reference to Exhibit 14 to the Current Report on Form 8-K filed February 14, 2018).</u>

21.1*	Subsidiaries
23.1*	Consent of ACM LLP, Independent Registered Public Accounting Firm, relating to Registration Statement on Form S-8.
31.1 *	Certification of Principal Executive Officer, pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2 *	Certification of Principal Financial and Accounting Officer, pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	Certification of Principal Executive Officer, pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2**	Certification of Principal Financial and Accounting, pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Schema
101.CAL*	XBRL Taxonomy Calculation Linkbase
101.DEF*	XBRL Taxonomy Definition Linkbase
101.LAB*	XBRL Taxonomy Label Linkbase
101.PRE*	XBRL Taxonomy Presentation Linkbase

+ Indicates a management contract or compensatory plan.

* Filed herewith.

** Furnished herewith.

SIGNIFICANT SUBSIDIARIES OF THE REGISTRANT

The following are the significant subsidiaries of Surna Inc. as of December 31, 2018 and the states or jurisdictions in which they are organized. Except as otherwise specified, in each case Surna Inc. owns, directly or indirectly, 100% of the voting securities of each subsidiary.

Name	State or jurisdiction of Entity
Hydro Innovations, LLC	Colorado

Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (Registration No. 333-219674) pertaining to the Surna Inc. 2017 Equity Incentive Plan of our report dated March 19, 2019, relating to the consolidated financial statements of Surna Inc. (which report expresses an unqualified opinion of the consolidated financial statements and an explanatory paragraph referring to the Company's ability to continue as a going concern), which appears in this Form 10-K.

/s/ ACM LLP

Greeley, Colorado
March 19, 2019

I, Anthony K. McDonald, the Chief Executive Officer of Surna Inc. certify that:

1. I have reviewed this annual report on Form 10-K of Surna Inc. for the fiscal year ended December 31, 2018;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated this 19th day of March 2019.

By: /s/ Anthony K. McDonald

Anthony K. McDonald
Chief Executive Officer

**CERTIFICATION PURSUANT TO RULE 13a-14(a) and 15d-14(a)
UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED**

I, Anthony K. McDonald, the Principal Financial and Accounting Officer of Surna Inc. certify that:

1. I have reviewed this annual report on Form 10-K of Surna Inc. for the fiscal year ended December 31, 2018;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated this 19th day of March 2019.

By: /s/ Anthony K. McDonald
Anthony K. McDonald
Principal Financial and Accounting Officer

**CERTIFICATION PURSUANT TO SECTION 1350, CHAPTER 63 OF TITLE 18, UNITED STATES CODE, AS ADOPTED PURSUANT TO SECTION 906 OF
THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report on Form 10-K for the year ended December 31, 2018 (the "Report") of Surna Inc. (the "Registrant"), as filed with the Securities and Exchange Commission on the date hereof, I, Anthony K. McDonald, the Chief Executive Officer of the Registrant, hereby certify, to the best of my knowledge, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

/s/ Anthony K. McDonald

Name: Anthony K. McDonald, Chief Executive Officer

Date: March 19, 2019

This certification accompanies this Annual Report on Form 10-K pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Such certification will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.

**CERTIFICATION PURSUANT TO SECTION 1350, CHAPTER 63 OF TITLE 18, UNITED STATES CODE, AS ADOPTED PURSUANT TO SECTION 906 OF
THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report on Form 10-K for the year ended December 31, 2018 (the "Report") of Surna Inc. (the "Registrant"), as filed with the Securities and Exchange Commission on the date hereof, I, Anthony K. McDonald, the Principal Financial and Accounting Officer of the Registrant, hereby certify, to the best of my knowledge, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

/s/ Anthony K. McDonald

Name: Anthony K. McDonald, Principal Financial and Accounting Officer

Date: March 19, 2019

This certification accompanies this Annual Report on Form 10-K pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Such certification will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.
