CLEARSIGN COMBUSTION CORP
Form 10-K
March 03, 2016

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2015

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 001-35521

CLEARSIGN COMBUSTION CORPORATION

(Exact name of registrant as specified in its charter)

WASHINGTON	**26-2056298**

(State or other jurisdiction of incorporation or organization) (I.R.S. Employer Identification No.)

12870 Interurban Avenue South

Seattle, Washington 98168

(Address of principal executive offices)

(Zip Code)

(206) 673-4848

(Registrant's telephone number, including area code)

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

Title of each class	**Name of each exchange on which registered**
Common Stock, par value $.0001	NASDAQ Capital Market

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

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 x

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 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 past 90 days.

Yes x No ¨

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 229.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to

submit and post such files). Yes x No ¨.

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K 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, or a smaller reporting company.

Large accelerated filer ¨	Accelerated filer ¨
Non-accelerated filer ¨	Smaller reporting company x
(Do not check if a smaller reporting company)	

Indicate by check mark whether the issuer is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ¨ No x

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter.

As of June 30, 2015, the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the last sale price of the common equity was $61,000,000.

Indicate the number of shares outstanding of each of the registrant's classes of common stock, as of the latest practicable date.

As of March 3, 2016, the registrant has 12,868,943 shares of common stock, par value $.0001, issued and outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement for the 2016 Annual Meeting of Shareholders are incorporated herein by reference in Part III of this Annual Report on Form 10-K to the extent stated herein. Such proxy statement will be filed with the Securities and Exchange Commission within 120 days of the registrant's fiscal year ended December 31, 2015.

Combustion Corporation

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS AND OTHER INFORMATION CONTAINED IN THIS REPORT

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and the provisions of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements give our current expectations or forecasts of future events. You can identify these statements by the fact that they do not relate strictly to historical or current facts. You can find many (but not all) of these statements by looking for words such as "approximates," "believes," "hopes," "expects," "anticipates," "estimates," "projects," "intends," "plans," "would," "should," " other similar expressions in this report. In particular, these include statements relating to future actions; prospective products, applications, customers and technologies; future performance or results of any products; anticipated expenses; and future financial results. These forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from our historical experience and our present expectations or projections. Factors that could cause actual results to differ materially from those discussed in the forward-looking statements include, but are not limited to:

- our limited cash and our history of losses;
- our ability to successfully develop and implement our technology and achieve profitability;
- our limited operating history;
- emerging competition and rapidly advancing technology in our industry that may outpace our technology;
- customer demand for the products and services we develop;
- the impact of competitive or alternative products, technologies and pricing;
- our ability to manufacture any products we design;
- general economic conditions and events and the impact they may have on us and our potential customers;
- our ability to obtain adequate financing in the future;

- our ability to continue as a going concern;

- our success at managing the risks involved in the foregoing items; and

- other factors discussed in this report.

Forward-looking statements may appear throughout this report, including without limitation, the following sections: Item 1"Business," Item 1A "Risk Factors," and Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations." The forward-looking statements are based upon management's beliefs and assumptions and are made as of the date of this report. We undertake no obligation to publicly update or revise any forward-looking statements included in this report. You should not place undue reliance on these forward-looking statements.

Unless otherwise stated or the context otherwise requires, the terms "ClearSign," "we," "us," "our" and the "Company" refer to ClearSign Combustion Corporation.

PART I

ITEM 1: BUSINESS

Introduction

We design and are developing technologies for the purpose of improving key performance characteristics of combustion systems, including emission and operational performance, energy efficiency and overall cost-effectiveness. Our patent-pending Duplex™ and Electrodynamic Combustion Control™ (ECC™) platform technologies enhance the performance of combustion systems in a broad range of markets, including the refinery, petrochemical, chemical, power and commercial boiler industries. Our Duplex technology uses a porous ceramic tile above a standard burner to significantly reduce flame length and achieve very low emissions without the need for external flue gas recirculation, selective catalytic reduction, or excess air systems. Our ECC technology introduces a computer-controlled high voltage electric field into a combustion volume in order to better control gas-phase chemical reactions and improve system performance and cost-effectiveness. To date, our operations have been funded primarily through sales of our common stock. We have earned no significant revenue since inception in 2008.

While we have not yet commercialized our Duplex or ECC technologies and our technologies have not been tested or verified by any independent third party, based on the results of our testing, we believe that our proprietary technology platforms may improve emissions control performance and operational performance for many types of industrial and commercial combustion systems. As a result, we also believe that our technologies may reduce costs associated with the construction (including refurbishment and upgrade), operation and maintenance of these combustion systems as compared to combustion systems that use no or alternative technology to enhance combustion and control emissions.

Based on the results of our testing, we believe our technologies compare favorably with current industry-standard air pollution control technologies, such as selective catalytic reduction devices, low- and ultra-low NOx burners (which address nitrogen oxides or NOx), excess air systems and other similar technologies. Such systems are used in our current target market segments of petroleum refining and petrochemical process heaters, package and utility boilers and large-scale once through steam generators (OTSGs).

Corporate History

We were incorporated in Washington on January 23, 2008. The address of our corporate headquarters is 12870 Interurban Avenue South, Seattle, Washington 98168 and our telephone number is (206) 673-4848. Our website can be accessed at www.clearsign.com. The information contained on or that may be obtained from our website is not a part of this report. All of our operations are located in the United States.

Our Industry

The combustion and emissions control markets are significant, both in the wide array of industries in which the systems are used and in the amount of money spent in installing and upgrading systems. The Energy Information Administration of the U.S. Department of Energy determined in its 2014 Annual Energy Outlook that the world's industrial sector consumed 165 quadrillion British thermal units (BTUs) of hydrocarbon fuels. These are used to provide heat for all manner of industrial processes, including boilers, furnaces, kilns and turbines. In order to maximize energy efficiency while keeping pace with regulatory guidelines for air pollution emissions, operators of these systems are continually installing, maintaining and upgrading a variety of costly process control, air pollution control and monitoring systems. Although we believe that there are many potential markets for our technologies, to date we have limited the introduction of our technologies to market segments that include petroleum refining and petrochemical process heaters, package boilers, and OTSGs.

Our Technologies

We are pursuing development of our technologies to enable future sales. These activities entail (i) field development projects in the case of our Duplex technology where we have successfully demonstrated our proprietary technology operating in our field testing with thermal output of up to 52 million BTU/hr, (ii) laboratory research in the case of our ECC technology where we have demonstrated certain attributes of our proprietary technology operating in our research facility with thermal output of up to 2 million BTU/hr, and (iii) business development and marketing activities with established entities that use steam generators, process heaters, boilers, solid fuel burners, and other combustion systems as well as original equipment manufacturers. We intend to continue to enter into collaborative arrangements, such as those described below, which would enable us to work closely with established companies in targeted industries to apply solutions developed in our laboratory and field settings.

Field Testing of our Duplex Technology in Once-Through Steam Generators

After performing testing on our Duplex technology in our laboratory furnace with thermal output up to 5 million BTU/hr, we commenced field development work in the fourth quarter of 2014 with an oil field operator in Southern California to demonstrate and test the Duplex technology in an OTSG with a thermal output ranging from 40 to 62.5 million BTU/hr used to facilitate a thermally enhanced oil recovery process in California's San Joaquin Valley. To date, we have tested an OTSG at a rate of 52 million BTU/hr and met the requirements of San Joaquin Valley Air Pollution Control District's Rule 4320, Advance Emission Reduction Options for Boilers, Steam Generators and Process Heaters Greater Than 5.0 MMBtu/hr, which prohibits NOx emissions exceeding 5 ppm (corrected at 3% O_2). These results were achieved without major modifications to the burner or the need for flue gas recirculation (FGR). During testing, the OTSG unit continued to supply steam at the capacity and quality required for oil field operations. Our agreement with this operator includes time-sensitive pricing, delivery and installation terms, if elected, that will apply to future purchases of this Duplex application. In September 2015, this operator placed an order to retrofit our Duplex technology in a second OTSG unit. Subject to final approval of the design, we expect the retrofit to be completed in 2016.

In May 2015, we received an order from an independent Southern California oil producer to retrofit a 25 million BTU/hr OTSG with our Duplex technology. The installation is expected to be completed 2016.

Based upon our results to date, we observed a thermal efficiency improvement in OTSGs of approximately 1% when compared to a baseline case with a conventional low NOx burner without FGR. OTSG systems typically operate with FGR to lower NOx emissions. FGR, however, penalizes thermal efficiency, increasing fuel and electricity costs. We estimate that Duplex, compared to systems operating with FGR, will provide an overall energy savings of as much as 3-4% which could represent a significant reduction in annual operating expense depending on variables such as the thermal output of the OTSG and the market price for natural gas and electricity. Further, compliance with current

emissions standards would eliminate the cost of any fines associated with the retrofitted operations. We continue to conduct testing to address additional performance criteria in order to further validate the environmental and operational benefits of our Duplex technology.

Field Testing of our Duplex Technology in Wellhead Enclosed Flares

In February 2016, we received an order through an intermediary, acting on behalf of a large Southern California oil producer, for installation in wellhead enclosed flares for the purpose of evaluating Duplex as a solution to the oil producer's NOx emissions challenges. We expect to deliver the first unit in 2016. Assuming that testing of the initial unit is successful, payment for the unit will be made and the oil producer plans to purchase four additional units at pre-determined prices approximating $1 million.

Field Testing of our Duplex Technology in Refinery Process Heaters

In August 2015, we executed an agreement with Tesoro Refining & Marketing Company LLC, a subsidiary of Tesoro Corporation, to evaluate our Duplex technology in a multiple-burner process heater located in Tesoro’s Los Angeles area refinery. The Duplex technology performance will be evaluated based on several performance criteria, including NOx emission criteria determined by California’s South Coast Air Quality Management District. The first phase of the project, involving initial design, was completed under a fixed price agreement in 2015. Future phases of the project are subject to approval of the design by Tesoro.

In September 2015, we executed an agreement with a subsidiary of Delek US Holdings, Inc. to install our Duplex technology in a process heater located in Delek's Tyler, Texas refinery. The Duplex installation is being installed to eliminate potential flame impingement upon process tubes and reduce maintenance costs and downtime. The installation is expected to be completed in 2016.

We previously executed two agreements regarding field tests related to process heaters with thermal outputs ranging from 12 to 15 million BTU/hr with two separate petroleum refineries in the San Joaquin Valley. Pursuant to each agreement, if we are able to retrofit the process heaters in accordance with the specifications set forth in the agreements, the refineries will purchase Duplex systems from us. These refineries have no other financial obligations under the agreements. We have commenced field testing in one of the refineries and expect to complete the projects in 2016.

We intend to continue field validation of our Duplex technology in order to produce sufficient data to demonstrate product attributes and dependability.

Laboratory Research of our ECC Technology

We continue to conduct solid fuel laboratory testing of our ECC technology in conjunction with six parties who contributed, in 2014 and 2015 combined, an aggregate of $125,000 to our research. If successful, this would create a basis for further focused laboratory studies prior to any field demonstrations. There is no assurance that additional research funds will be received, terms relating to further research will be reached, or a final agreement for additional research or laboratory studies will be executed between us and any of these six parties.

Technical Components of our Duplex and ECC Technologies

Our Duplex burner technology typically consists of a traditional industrial burner and a porous ceramic tile. When the uncombusted mix of gaseous fuel and air is directed at the tile, hot gas combusts within the tile itself. Because the fuel and air have more time to mix, the NOx- forming hot spots that are typically produced in an open flame are greatly eliminated and a dramatically shorter flame is produced. NOx, a regulated pollutant comprised largely of nitrogen oxide and nitrogen dioxide, is greatly reduced without any external fans or associated power, thereby minimizing harmful emissions while improving system efficiency. A shorter flame allows for improved heat transfer and operation of the furnace at a higher capacity since it reduces the possibility of flame impingement and coking in a combustion chamber.

Our ECC technology consists, in its simplest form, of four major components: (a) a computer, (b) standard software delivering proprietary algorithms to (c) a power amplifier (resident outside the combustion chamber) and (d) electrodes inside the combustion chamber. ECC introduces a high voltage electric field into the combustion process to control the resulting flames electrically through the naturally forming ions. The electrodes are optimized in material and shape to best suit the specific geometry of a given installation. We have also demonstrated a technique to apply ECC to a combustion system without requiring an electrode to have physical contact with the flame. Based on our research and demonstrations, we believe ECC to be ideally suited to solid fuel combustion.

The basic components of both systems are either available “off the shelf” or require manufacturing techniques that are well within the current state of the art. Thus, our products are readily available and scalable for high volume demand.

We believe our technologies can be retrofitted to existing combustion systems to improve their performance and have the potential to provide substantial savings in both capital and operating costs, or, for new-builds, can serve as the basis for fundamental improvements in the design, cost and operation of combustion systems.

Research and Development Plan

We have tested aspects of our Duplex and ECC technologies in our laboratory on our 1 million and 5 million BTU/hr research furnaces, our 1 million BTU/hr boiler simulator, and our 1 million BTU/hr solid fuel furnace. We have installed our Duplex technology in three field test sites: two OTSG applications and one process heater. We also continue to conduct solid fuel laboratory testing utilizing our ECC technology in conjunction with six parties who contributed, in 2014 and 2015 combined, a total of $125,000 to our research. If successful, this would create a basis for further focused laboratory studies prior to any field demonstrations. Our technologies have not been tested or verified by any independent third party. Our research and development efforts are following this sequence of planned activities:

- *Scale up to commercially relevant sizes.* With regard to our ECC technology, we have designed and built furnaces and burners at what we believe to be a commercially relevant scale. We have identified potential development partners and customers with whom we are engaged in discussions to apply our ECC technology to their particular uses at commercially relevant scales, which can be 1 million BTUs or greater. The solid fuel laboratory testing of our ECC technology as described above is currently ongoing.

- *Site demonstration at full scale.* We have begun to demonstrate our Duplex technology at commercial sites firing retrofitted OTSGs up to 52 million BTU/hr and a retrofitted three burner, 12 million BTU/hr petroleum refinery process heater. Our early site demonstrations are aimed at retrofitting existing burners in single or multi-burner systems in order to evaluate our Duplex technology at full scale in several operating systems.

- *Complete first installation.* After completion of site demonstrations that include various applications of our Duplex technology, we anticipate that these demonstrations will transition to validation and documentary phases with extended operation periods in the field. This would include validation from prospective customer users and environmental regulatory bodies. Although field development testing of our Duplex technology is ongoing, in December 2015 the South Coast Air Quality Management District governing the greater Los Angeles area designated Duplex as a Best Available Retrofit Control Technology in the field of refinery process heaters and boilers. We believe that such demonstrations, if successful, would provide the impetus for commercial adoption within the applicable industry.

- *Enhancement of our intellectual property portfolio.* We have generated inventions that we believe to be patentable subject matter and for which we have been seeking protection through patent application filings. As of January 2016, we have filed approximately 155 patent applications with the U.S. Patent and Trademark Office (USPTO) and certain foreign regulatory bodies related to our Duplex and ECC technologies, which remain pending. We have been granted 6 patents by the USPTO related to our ECC technology. We cannot predict when our patent applications may result in issued patents, if at all. Further, we may modify a patent application in the future as we develop additional information. As a result, we may create additional patent applications from an existing application, consolidate existing patent applications, abandon applications, or otherwise modify applications based upon our judgment in order to protect our intellectual property in a reasonably cost beneficial manner.

The Combustion Markets

Overview

We compete in the combustion and emissions control markets. These are highly competitive industries that are currently dominated by companies that have both substantially greater financial resources than we do and established products. However, we believe, based on the testing and the field studies done to date, that our technologies offer a unique and powerful ability to improve emissions and operational performance, energy efficiency and overall cost-effectiveness. We are targeting the following segments of the combustion market:

- process heaters for petroleum refining and petrochemical processing,
- heating systems in package boilers, and
- larger-scale steam generation systems and power boilers.

In each segment, we plan to market solutions with our Duplex technology that we believe could simultaneously improve both pollution control and operational efficiency characteristics through (a) cost-effective retrofitting of our Duplex technology onto existing standard system designs, and (b) new system designs.

Market Entry

We believe that our technologies could be applied to a wide range of systems in which there is a flame. While this implies many potential market opportunities, it also requires that we exercise a disciplined approach in comparatively evaluating those opportunities in order to select and prioritize those applications that are cost effective and afford the best mix of time and cost required for development relative to revenue potential. We also aim to select applications in which our technologies either offer immediate, clear, meaningful, and measurable advantages relative to competing technologies or address unmet market needs.

While we believe that the implementation of our technologies will eventually enable improved performance in new system designs, we believe that retrofitting existing systems to improve their performance will provide the quickest path to market. This is because (1) the installed base of existing combustion systems is far greater than the annual number of newly built systems, (2) integrating our technology into a retrofit appears less complex than a new combustion system designed by an OEM, (3) the design cycle of a retrofit application appears to be far shorter, and (4) we believe that with the currently challenging market conditions, less costly retrofits are more attractive to many segments of the energy market than new capital equipment and infrastructure builds to comply with environmental regulations and derive cost efficiencies. We have therefore concluded, based on our preliminary analyses, that the earliest applications of our technologies are likely to involve the retrofit and upgrade of industrial scale combustion systems with our Duplex technology to improve their environmental performance and energy efficiency, while at the same time making them more adaptable to changing operating conditions.

Because of the market needs and opportunities that we currently perceive, we intend to first target the following segments of the industrial combustion market:

- process heaters for petroleum refining and petrochemical processing,
- heating systems in package boilers, and
- larger-scale steam generation systems and power boilers

Sales and Marketing Plan

Partnership Strategy. We believe that our technologies have the potential to transform industries that rely on combustion and that our technologies are broadly applicable in large, scalable, global markets.

We intend to form research and development arrangements to develop our technology within targeted segments. Among the types of potential partners with which we will seek to establish relationships in the U.S. and globally will be:

- End users of OEM products and services interested in advancing the development of our technology in order to address their operational needs;
- Large OEMs interested in our technology;
- Industry research groups, whose mission is the development and testing of new technologies for the eventual benefit of their member companies; and
- Government entities such as the U.S. Department of Energy, who are chartered with the development of longer-range and potentially disruptive energy technologies.

We currently are pursuing field development programs of our Duplex technology. These programs are aimed at our target industrial combustion markets and include the enhanced oil recovery industry, where an OTSG has been retrofitted with our technology, and two petroleum refineries, where process heaters will be retrofitted. Further, we continue to conduct solid fuel laboratory testing utilizing our ECC technology.

Pricing Strategy. Our target markets are characterized by well-established competitors in mature businesses. As a result, pricing in these markets is typically driven more by competitive pricing rather than broad product value. Since we believe that our technology will provide greater economic value in comparison to our competitors, we plan to price our technology based upon the value that we believe it will provide in reduced air pollution control costs, including fines, and reduced maintenance and operating costs.

Channel Structure and Path to Market. Our path to market could involve any combination of (1) licensing our technologies for either one-time or periodic licensing fees for a period of time within specific fields of use and/or territories, (2) sale of our intellectual property rights within specific fields of use and/or territories, or (3) manufacturing the components required to enable our technologies and/or supplying a complete burner package through strategic subcontracting agreements. Since our solutions consist largely of off the shelf components, we do not anticipate that we will require a large manufacturing capacity. To the extent we will require production of specific hardware (electrodes, for example), we plan to rely on outside contract manufacturers, which we believe are widely available and for which a competitive market exists.

Competition and Barriers to Entry

The industry in which we operate is global in scope and is populated by large, established suppliers of burners and post-combustion air pollution control systems, all of whom possess substantially greater resources than we do. Worldwide, suppliers of burners and APC equipment include but are not limited to companies such as UOP, Callidus and Maxon (all three are subsidiaries of Honeywell), John Zink Hamworthy Combustion (a subsidiary of Koch Industries and including Coen), Babcock and Wilcox, Westinghouse, Eclipse, General Electric, Haldor Topsøe, Hitachi, Linde, and Fives North American, among others.

These systems include low NO_X burners, electrostatic precipitators, bag houses, selective catalytic reduction systems and various types of scrubbers. The companies that provide these systems are well established and their combustion and emissions control technologies are based on mature, well-understood technologies that are proven in the market. However, we believe the further development of their technologies will be limited largely to marginal performance improvements. As a consequence of this relatively slow pace of innovation, we believe current technology offerings have become largely commoditized, and differentiation between suppliers is very often based on price.

From a customer's perspective, legacy air pollution control technology is viewed as a cost of doing business, and as a means to operate within regulatory requirements and avoid fines. Unlike most other kinds of capital equipment that provide an economic return through enhanced productivity or efficiency, we believe customers of traditional emissions control equipment do not otherwise expect any positive return on these investments.

We are seeking to enter the combustion and emissions control market and to establish ourselves in a highly competitive industry against companies that have both substantially greater financial resources than we do and established products. Because they have been available in the market for many years, our competitors' product offerings may have several advantages. Among these are:

- *Availability of trained technicians:* The number of technicians who are able to specify, install and operate our competitors' products will be greater than those who have been trained on our technology.
- *Conservative choice:* Because our competitors' technologies are well understood and their performance has been proven over time, customers may perceive their offerings represent a safe, low-risk choice.
- *Business relationships:* Because our competitors have established long-standing personal relationships with their customers, they may prefer to continue to do business with one another.

However, if we are able to successfully bring our technology to market, we believe that our technology would be an attractive alternative to the products and solutions offered by companies with which we seek to compete. In particular, we believe that our technology could offer a unique cost-effective means to reduce many pollutants at the source while improving operational efficiency. We believe our technology could be capable of reducing the requirement for costly legacy equipment, offering customers the prospect of a positive return on their investment in the form of enhanced efficiency and productivity while reducing emissions to the levels of existing air pollution control technologies such as scrubbers, electrostatic precipitators and fabric filters (bag houses). In particular, we believe our technology could offer the following advantages when compared with the next best alternatives.

Emissions Reduction from Combustion Sources. Current technology reduces emissions by using mechanical mixing aids such as swirlers, staging combustion in two or more zones, or treating emissions such as NO_X after the fact using selective catalytic reduction. In contrast, we believe our technology could:

- enhance mixing with none of the additional pressure drop or power requirements that swirlers demand; and
- reduce NO_X without reducing turndown or narrowing the burner operating window as staged combustion does or requiring expensive post combustion treatments with chemical additives such as catalytic reduction requires.

Improving flame shape. The main goal of virtually all process combustion is to transfer heat to raise steam or enable a chemical reaction, and to do so as efficiently as possible. Conventional technology uses buoyancy (the natural tendency for a flame and heat to rise opposite to the force of gravity) and momentum (fuel mixed with air and forced through a nozzle, as in a torch) as the only tools to shape flames. Unfortunately, momentum effects die out over distance from their source and buoyancy always operates counter to the gravitational field. Moreover, momentum and buoyancy effects often drive wayward flames into process tubes where they cause overheating and potential failure. In contrast, we believe that our technology could allow the use of much stronger body forces that are not limited by orifice diameter and are unaffected by gravitational fields. We believe the result would be better control over flame shape and direction, allowing the process to operate free of the effects of impingement and non-optimal flame structure.

Enhancing heat-transfer and process efficiency. The main objective of industrial combustion in furnaces and boilers is to transfer heat to a process fluid. Conventional combustion techniques do their best to optimize flame shape to achieve this end, but we believe conventional combustion techniques have no additional means for enhancing heat transfer. In contrast, we believe that our technology could enhance heat transfer to the process tube independent of flame shape using electrical current, and that the result could be an increase in process efficiency or throughput, which is a critical goal in the industrial combustion industry.

Compared to the products and solutions of companies with which we seek to compete, we believe our technology could provide our potential customers with a lower total cost of ownership, providing the prospect of a positive economic return on investment to systems operators. We believe this would be due to a reduction in their capital and

operating expenses, and an increase in energy efficiency.

While we believe that our technology could offer the advantages discussed above, we do not currently represent a significant competitive presence in our industry.

Research and Development Program

Our research and development program consists of bench- and pilot-scale research anticipating future site demonstrations. The experience and industry contacts of our management, board of directors, and consultants with potential customers in the petroleum, petrochemical, and industrial steam applications inform our research program. These are supported by field development agreements, research agreements, and memoranda of understanding with potential development partners, customers and research institutions. Our research and development activities make use of employees and consultants that are respective experts in the areas of industrial combustion, statistical experimental design, gas turbines, fluid mechanics, physics of particles and ions, and electric fields. We spent $2,947,000 and $2,327,000, offset by the receipt of $15,000 and $110,000 in each of 2015 and 2014, respectively, from participants in the solid fuel research associated with ECC, on research and development for the years ended December 31, 2015 and 2014, respectively.

Intellectual Property Protection

We are pursuing an aggressive intellectual property strategy including:

- *Aggressive invention and ideation.* Thus far we have identified numerous specific inventions that we believe to be novel and patentable. We are pursuing a proven ideation process to enhance and continue these discoveries.
- *Development of a strong patent portfolio.* As of January 2016, we have been awarded 6 patents related to ECC technology and have 155 patent applications pending for Duplex and ECC technologies. We cannot predict when our patent applications may result in issued patents, if at all. Further, we may modify a patent application in the future as we develop additional information. As a result, we may create additional patent applications from an existing application, consolidate existing patent applications, abandon applications, or otherwise modify applications based upon our judgment in order to protect our intellectual property in a reasonably cost beneficial manner.

Government Regulation

Government approval is not required in order for us to sell the principal products or services that we are developing. However, government regulation, particularly environmental regulation, is likely to play a role in shaping our product mix and offerings. Our technology includes enhancement of the combustion process, in the case of our ECC technology inclusion of a computer-controlled electric field to selectively promote, suppress, retard or accelerate chemical reactions as desired, and to reduce certain emissions at a lower cost than current air pollution control devices. Field implementation of our technology will therefore require permits from various local, state and federal agencies that regulate mechanical and electrical infrastructure and fire and air pollution control.

We believe that we offer major advances in emissions and efficiency reductions. We believe emissions regulations could enhance market demand for technology if such regulations require a reduction in criteria pollutants such as NO_X, SO_X, and CO, or others such as CO_2, or mercury. In such cases, possible legislation on greenhouse gases, boiler MACT rules, or general reductions in required criteria pollutant levels could serve our business objectives. Although the timing of such regulations is uncertain, the general trend over the last decades continues to be government-mandated reduction for all criteria pollutants and the addition of new emissions to those regulated. Ultimately, it may be possible for our technology to achieve EPA BACT (Best Available Control Technology) designation. Although field development testing of our Duplex technology is ongoing, in December 2015 the South Coast Air Quality Management District governing the greater Los Angeles area designated Duplex as a Best Available Retrofit Control Technology in the field of refinery process heaters and boilers. The availability of our technology, by itself, could accelerate the government’s willingness to adopt more stringent environmental regulations. Further, efficiency improvements include enhanced mixing, lower excess air requirements, and improved heat transfer to the process. We believe such efficiency improvements could generate market demand regardless of the existing regulatory framework because they could result in savings to businesses that adopt our technology.

We are not aware of any current or proposed federal, state or local environmental compliance regulations that would have a material detrimental effect on our business objectives. We do not anticipate any major expenditures to be required in order for our technology to comply with any environmental protection statutes.

Employees

As of March 3, 2016, we had 18 full-time employees and 1 part-time employee. None of these employees are covered by a collective bargaining agreement, and we believe our relationship with our employees is good.

ITEM 1A: RISK FACTORS

We are subject to various risks that may materially harm our business, prospects, financial condition and results of operations. An investment in our common stock is speculative and involves a high degree of risk. In evaluating an investment in shares of our common stock, you should carefully consider the risks described below, together with the other information included in this report.

The risks described below are not the only risks we face. If any of the events described in the following risk factors actually occurs, or if additional risks and uncertainties later materialize that are not presently known to us or that we currently deem immaterial, then our business, prospects, results of operations and financial condition could be materially adversely affected. In that event, the trading price of our common stock could decline, and you may lose all or part of your investment in our shares. The risks discussed below include forward-looking statements, and our actual results may differ substantially from those discussed in these forward-looking statements.

Risks Related to Our Business

We are a company with a limited operating history and our future profitability is uncertain. We anticipate future losses and negative cash flow and we may never be profitable.

We are a company with a limited operating history and limited revenues to date. We have incurred losses since our inception and expect to experience operating losses and negative cash flow for the foreseeable future. As of December 31, 2015, we had a total accumulated deficit of $29,158,000. We anticipate our losses will continue to increase from current levels because we expect to incur additional costs and expenses related to prototype development, consulting costs, laboratory development costs, marketing and other promotional activities, the addition of engineering and manufacturing personnel, and our continued efforts to form relationships with strategic partners. We may never generate significant revenue and we may never be profitable.

If we do not receive additional financing when and as needed in the future, we may not be able to continue our research and development efforts or commercialization efforts and our business may fail.

Our business is highly capital-intensive, and requires significant capital investments in order for it to develop. Our cash on hand will likely not be sufficient to meet all of our future needs and we will likely require substantial additional funds in excess of our current financial resources for research, development and commercialization of our

technology, to obtain and maintain patents and other intellectual property rights in our technology, and for working capital and other purposes, the timing and amount of which are difficult to ascertain. Until our technology generates revenues sufficient to support our operations, we plan to obtain the necessary working capital for operations through the sale of our securities, but we may not be able to obtain financing in amounts sufficient to fund our business plans. Furthermore, if our target customers are slow to adopt our technology, we may require additional investment capital in order to continue our operations. If we cannot obtain additional funding when and as needed, our business might fail.

Worldwide economic conditions may adversely affect our business, operating results and financial condition.

The United States economy continues to experience slower growth than typically expected in a period of recovery. Further, recent developments include increased strength of the U.S. dollar compared to other currencies of the world and a significant decrease in the price of crude oil. Some financial and economic analysts predict that the world economy may be entering into a period of prolonged slow economic growth, or in certain regions recessions, characterized by high unemployment, limited availability of credit, increased rates of default and bankruptcy, and decreased consumer and business spending. These developments, if they occur, could negatively affect our business, prospects, operating results and financial condition in a number of ways. For example, worldwide economic developments could have an adverse effect on the global credit markets. Tightening of credit typically results in financing terms that are less attractive to borrowers and, in many cases, the unavailability of certain types of debt financing. If these economic conditions worsen, and if we are required to obtain debt financing during some stage of our development to meet our working capital or other business needs, we may not be able to obtain that financing. Further, even if we are able to obtain the financing we need, it may be on terms that are not favorable to us, with increased financing costs and restrictive covenants. Additionally, slow growth typically results in lower capital spending, reduced new product development, and reduced research. This may make it more difficult for us to introduce new products.

Market acceptance of our technology and business is difficult to predict. If our technology does not achieve market acceptance, our business could fail.

Our company and technology are new and unproven. If we are unable to effectively develop and timely promote our technology, gain recognition in our market segment, and develop a critical level of successful sales and product installations, we may not be able to successfully achieve sales revenue and our results of operations and financial condition would then suffer. Our ability to achieve future revenue will depend significantly upon achieving a critical mass of market awareness and sales to potential customers of our products. While we plan to achieve this awareness over time, there cannot be assurance that awareness of our company and technology will develop in a manner or pace that is necessary for us to achieve profitability in the near term.

Further we cannot predict the rate of adoption or acceptance of our technology by potential customers. While we may be able to effectively demonstrate the feasibility of our technology, this does not guarantee the industrial combustion and power generation market will accept it, nor can we control the rate at which such acceptance may be achieved. In certain of our market segments, there is a well-established channel with a limited number of companies engaged in reselling to our target customers. Failure to achieve productive relations with a sufficient number of these prospective partners may impede adoption of our technology. Additionally, some potential customers in our target industries are historically risk-averse and have been slow to adopt new technologies. If our technology is not accepted in the industrial combustion and power generation market, we may not earn enough by selling or licensing our technology to support our operations, recover our research and development costs or become profitable and our business could fail.

Our efforts may never demonstrate the feasibility of our product.

Our research and development efforts remain subject to all of the risks associated with the development of new products based on emerging and innovative technologies, including without limitation unanticipated technical or other problems, our ability to scale our technology to large, industrial applications, conditions in the field during installation and the possible insufficiency of funds for completing development of these products. Technical problems, including those specific to customer site implementation, may result in delays and cause us to incur additional expenses that would increase our losses. If we cannot complete, or if we experience significant delays in completing, research and development of our technology for use in potential commercial applications, particularly after incurring significant expenditures, our business may fail.

We may fail to adequately protect our proprietary technology, which would allow our competitors to take advantage of our research and development efforts.

Our long-term success largely depends on our ability to market our technology. We rely on a combination of patent, trade secret and other intellectual property laws, confidentiality and security procedures and contractual provisions to establish and protect our proprietary rights in our technology, products and processes. If we fail to obtain or maintain these protections, we may not be able to prevent third parties from using our proprietary technologies. Our pending or future patent applications may not result in issued patents. In addition, any patents issued to us in the future may not contain claims sufficiently broad to protect us against third parties with similar technologies or products or from third parties infringing such patents or misappropriating our trade secrets or provide us with any competitive advantage. In addition, effective patent and other intellectual property protection may be unenforceable or limited in foreign countries. If a third party initiates litigation regarding the validity of our patents, and is successful, a court could revoke our patents or limit the scope of coverage for those patents.

We also rely upon trade secrets, proprietary know-how and continuing technological innovation to remain competitive. We protect this information with reasonable security measures, including the use of confidentiality and invention assignment agreements with our employees and consultants and confidentiality agreements with strategic partners. It is possible that these agreements may not be sufficient or that these individuals or companies may breach these agreements and that any remedies for a breach will be insufficient to allow us to recover our costs and damages. Furthermore, our trade secrets, know-how and other technology may otherwise become known or be independently discovered by our competitors.

We may incur substantial costs as a result of litigation or other proceedings relating to patent and other intellectual property rights.

A third party may sue us for infringing its intellectual property rights. Likewise, we may need to resort to litigation to enforce our patent rights or to determine the scope and validity of third-party intellectual property rights. The cost to us of any litigation or other proceeding relating to intellectual property rights, even if resolved in our favor, could be substantial, and the litigation would divert our efforts from our business activities. Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. If we do not prevail in this type of litigation, we or our strategic collaborators may be required to pay monetary damages and/or expenses; stop commercial activities relating to our products; obtain one or more licenses in order to secure the rights to continue manufacturing or marketing our products; or attempt to compete in the market with substantially similar products. Uncertainties resulting from the initiation and continuation of any litigation could limit our ability to continue some of our operations.

We cannot guarantee that any research and development partnership we enter into will be successful.

We intend to form research and development arrangements to develop our technology within targeted segments. Collaborative arrangements involve risks that participating parties may disagree on business decisions and strategies. These disagreements could result in delays, additional costs, risks of litigation, and failure of the development of our technology within the combustion market segment. Success of any collaborative arrangements we enter into will depend in part on whether those with whom we collaborate fulfill their contractual obligations satisfactorily. If a party with whom we collaborate fails to perform its contractual obligations satisfactorily, we may be unable to make the additional investments or provide the added services that would be required to compensate for that failure. If we are unable to adequately address any such performance issues, our reputation may be materially adversely affected and we may be exposed to legal liability. Our inability to successfully maintain collaborative relationships, once we enter into them, or to enter into new collaborative arrangements, could have a material adverse effect on our results of operations.

Changes to environmental regulations could make our technology less desirable.

The negative environmental impacts of industrial activity have given rise to significant environmental regulation in industrialized countries. These regulations are important incentives in the adoption of technologies like ours. To the extent that environmental regulations in the United States and in other industrialized countries are modified in the future, or even relaxed, our technology may not produce the results required, or may even be unnecessary, to comply with the modified regulations. In that case, our business and results of operations would be materially adversely affected.

If we are unable to keep up with rapid technological changes, our products may become obsolete.

The market for alternative energy products is characterized by significant and rapid technological change and innovation. Although we intend to employ our technological capabilities to create innovative products and solutions that are practical and competitive in today's marketplace, future research and discoveries by others may make our products and solutions less attractive or even obsolete compared to other alternatives that may emerge.

Our technology and its industrial applications have not yet been safety tested.

There is inherent danger in dealing with the combustion process. There is additional danger in modifying this process in ways that are new and, as yet, untested on a commercial scale. Although we have not yet encountered any areas of risk in the development or testing of our products beyond those already inherent in the combustion process or those particular to an industrial site, the Company may be exposed to liabilities should an industrial accident occur during development, testing, or operation in our laboratory or during field implementation of our technology.

We will depend on approval from various local, state and federal agencies to implement and operate our technology. There is no assurance that these agencies will approve our technology.

Our technology includes enhancement of the combustion process, inclusion of a computer-controlled electric field to selectively promote, suppress, retard or accelerate chemical reactions as desired, and to reduce certain emissions at a lower cost than current air pollution control devices. Field implementation of our technology will therefore require permits from various local, state and federal agencies that regulate mechanical and electrical infrastructure and fire and air pollution control. Our technology may be subject to heightened scrutiny since it will be new to these governing bodies. As such, there may be delays or rejections in applications of portions of or all of our technology in the individual jurisdictions involved.

Because our technology has not yet been fully developed or implemented, we are uncertain of our profit margins and whether such profit margins, if achieved, will be able to sustain our business.

We have neither completed laboratory or field testing, nor fully developed our products, cost of goods or pricing. As a result, we cannot predict our profit margins. Our operating costs could increase significantly compared to those we currently anticipate due to unanticipated results from the development process, application of our technology to unique or difficult processes, regulatory requirements and particular field implementations. Further, we envision our pricing to be highly dependent on the benefits that our customers believe they will achieve using our products. Accordingly, we cannot predict whether or when we will achieve profitability, and if achieved, the amount of such profit margins.

Many of our potential competitors have greater resources, and it may be difficult to compete against them.

The energy industry is characterized by intense competition. Many of our potential competitors have better name recognition and substantially greater financial, technical, manufacturing, marketing, personnel and/or research capabilities than we do. Although at this time we do not believe that any of our potential competitors has technology similar to ours, if and when we complete the commercialization of products based on our technology, potential competitors may respond by developing and producing similar products. Many firms in the energy industry have made and continue to make substantial investments in improving their technologies and manufacturing processes. In addition, they may be able to price their products below the marginal cost of production in an attempt to establish, retain or increase market share. Because of these circumstances, it may be difficult for us to compete successfully in the energy market.

The loss of the services of our key management and personnel or the failure to attract additional key personnel could adversely affect our ability to operate our business.

A loss of one or more of our current officers or key employees could severely and negatively impact our operations. Of particular note, the loss of services of Stephen E. Pirnat, Chief Executive Officer and President, Dr. Roberto Ruiz, Chief Operating Officer, Joseph Colannino, Chief Technology Officer, or Dr. Donald W. Kendrick, Senior Vice President of Technology could significantly harm our business. We have no present intention of obtaining key-man life insurance on any of our executive officers or management. Additionally, competition for highly skilled technical, managerial and other personnel is intense. As our business develops, we might not be able to attract, hire, train, retain and motivate the highly skilled managers and employees we need to be successful. If we fail to attract and retain the necessary technical and managerial personnel, our business will suffer and might fail.

We are an "emerging growth company" under the JOBS Act of 2012 and we cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make our common stock less attractive to investors or make it more difficult to raise capital as and when we need it.

We are an “emerging growth company”, as defined in the Jumpstart Our Business Startups Act of 2012 (“JOBS Act”), and we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not “emerging growth companies” or smaller reporting companies including, but not limited to, not being required to comply with the auditor attestation requirements of section 404 of the Sarbanes-Oxley Act and reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements. In addition, emerging growth companies are entitled to take advantage of exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved, even though smaller reporting companies were subject to this requirement for the first annual meeting that was held after January 21, 2013. Furthermore, an “emerging growth company” can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile and it may be difficult for us to raise additional capital as and when we need it. If we are unable to raise additional capital as and when we need it, our financial condition and results of operation may be materially and adversely affected.

We will remain an “emerging growth company” until December 31, 2017, although we will lose that status sooner if our revenues exceed $1 billion, if we issue more than $1 billion in non-convertible debt in a three year period, or if the market value of our common stock that is held by non-affiliates exceeds $700 million as of any June 30.

Risks Related to Owning Our Common Stock

The public market for our common stock has been volatile since completion of our initial public offering. This may affect the ability of our investors to sell their shares as well as the price at which they sell their shares.

We completed our initial public offering in April 2012. Since that time through February 2016, our shares have traded from $2.98 per share to $11.75 per share on a closing price basis and day-to-day trading has been volatile at times. This volatility may continue or increase in the future. The market price for the shares may be significantly affected by factors such as progress in the development of our technology, agreements with research facilities or co-development partners, commercialization of our technology, variations in quarterly and yearly operating results, general trends in the alternative energy industry, and changes in state or federal regulations affecting us and our industry. Furthermore, in recent years the stock market has experienced extreme price and volume fluctuations that are unrelated or disproportionate to the operating performance of the affected companies. Such broad market fluctuations may adversely affect the market price of our common stock.

We have the right to issue shares of preferred stock. If we were to issue preferred stock, it is likely to have rights, preferences and privileges that may adversely affect the common stock.

We are authorized to issue 2,000,000 shares of “blank check” preferred stock, with such rights, preferences and privileges as may be determined from time-to-time by our board of directors. Our board of directors is empowered, without shareholder approval, to issue preferred stock in one or more series, and to fix for any series the dividend rights, dissolution or liquidation preferences, redemption prices, conversion rights, voting rights, and other rights, preferences and privileges for the preferred stock. No shares of preferred stock are presently issued and outstanding and we have no immediate plans to issue shares of preferred stock. The issuance of shares of preferred stock, depending on the rights, preferences and privileges attributable to the preferred stock, could adversely reduce the voting rights and powers of the common stock and the portion of the Company’s assets allocated for distribution to common stock holders in a liquidation event, and could also result in dilution in the book value per share of our common stock. The preferred stock could also be utilized, under certain circumstances, as a method for raising additional capital or discouraging, delaying or preventing a change in control of the Company, to the detriment of our shareholders. We cannot assure you that the Company will not, under certain circumstances, issue shares of its preferred stock.

We may be required to raise additional financing by issuing new securities, which may have terms or rights superior to those of our shares of common stock, which could adversely affect the market price of our shares of common stock and our business.

We will require additional financing to fund future operations, including expansion, capital costs and the costs of any necessary implementation of technological innovations or alternative technologies. We may not be able to obtain financing on favorable terms, if at all. If we raise additional funds by issuing equity securities, the percentage ownership of our then-current shareholders will be reduced. Further, we may have to offer new investors in our equity securities rights that are superior to the holders of common stock, which could adversely affect the market price and the voting power of shares of our common stock. If we raise additional funds by issuing debt securities, the holders of these debt securities would similarly have some rights senior to those of the holders of shares of common stock, and the terms of these debt securities could impose restrictions on operations and create a significant interest expense for us which could have a materially adverse effect on our business.

We have not paid dividends in the past and have no immediate plans to pay dividends.

We plan to reinvest all of our earnings, to the extent we have earnings, in order to market our products and to cover operating costs and to otherwise become and remain competitive. We do not plan to pay any cash dividends with respect to our securities in the foreseeable future. We cannot assure you that we would, at any time, generate sufficient surplus cash that would be available for distribution to the holders of our common stock as a dividend.

Due to the large number of shares of our common stock that are beneficially owned by our officers and directors, management of our Company has significant influence in a number of decisions that may affect our shareholders.

All decisions with respect to the management of the Company are made by our board of directors and our officers, who beneficially own approximately 11% of our common stock as of March 3, 2016, as calculated in accordance with Rule 13d-3 promulgated under the Securities Exchange Act of 1934. Therefore, management has significant influence in electing the board of directors who, in turn, have the power to appoint the officers of the Company and to determine the direction, objectives and policies of the Company including, without limitation, the purchase of businesses or assets; the sale of all or a substantial portion of the assets of the Company; the merger or consolidation of the Company with another corporation; raising additional capital through financing and/or equity sources; the retention of cash reserves for future product development, expansion of our business and/or acquisitions; the filing of registration statements with the Securities and Exchange Commission for offerings of our capital stock; and transactions which may cause or prevent a change in control of the Company or its winding up and dissolution.

We have a significant number of options and warrants outstanding and we may issue additional options in the future to employees, officers, directors, independent contractors and agents. Sales of the underlying shares of common stock could adversely affect the market price of our common stock.

As of March 3, 2016, we had outstanding options and warrants for the purchase of 723,400 and 564,272 shares of common stock, respectively. Under the ClearSign Combustion Corporation 2011 Equity Incentive Plan and the ClearSign Combustion Corporation 2013 Consultant Stock Plan (collectively, the “Plans”), we have the ability to grant awards of shares or options to employees, officers, directors, independent contractors and agents. Furthermore, as of March 3, 2016, we have reserved an additional 460,266 shares of common stock for such awards and the Plans provide that this number may increase quarterly by an amount of up to 11% of the number of shares issued by the Company each quarter. Certain holders may sell these shares in the public markets from time to time, without limitations on the timing, amount or method of sale. If our stock price rises, the holders may exercise their warrants and options and sell a large number of shares. This could cause the market price of our common stock to decline.

We have incurred and will incur significant costs as a result of being a public company that reports to the Securities and Exchange Commission and our management is required to devote substantial time to meet compliance obligations.

As a public company reporting to the Securities and Exchange Commission, we incur significant legal, accounting, investor relations, printing, board compensation, and other expenses that we did not incur as a private company. These costs totaled $828,000 in 2015. We are subject to the reporting requirements of the Securities Exchange Act of 1934 and the Sarbanes-Oxley Act of 2002 (with the exception of the requirement of auditor attestation of internal control over financial reporting from which we are currently excluded as a smaller reporting company and an emerging growth company), as well as rules subsequently implemented by the Commission that impose significant requirements on public companies, including requiring establishment and maintenance of effective disclosure and financial controls and changes in corporate governance practices. In addition, on July 21, 2010, the Dodd-Frank Wall Street Reform and Protection Act was enacted. There are significant corporate governance and executive compensation-related provisions in the Dodd-Frank Act that as we grow could increase our legal and financial compliance costs, make some activities more difficult, time-consuming or costly and may also place undue strain on our personnel, systems and resources. Our management and other personnel continually devote a substantial amount of time to these compliance initiatives. In addition, these rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. As a result, it may be more difficult for us to attract and retain qualified people to serve on our board of directors, our board committees or as executive officers.

Our charter documents and Washington law may inhibit a takeover that shareholders consider favorable.

Provisions of our Articles of Incorporation and bylaws and applicable provisions of Washington law may delay or discourage transactions involving an actual or potential change in our control or change in our management, including transactions in which shareholders might otherwise receive a premium for their shares, or transactions that our shareholders might otherwise deem to be in their best interests. The provisions in our Articles of Incorporation and bylaws:

- authorize our board of directors to issue preferred stock without shareholder approval and to designate the rights, preferences and privileges of each class; if issued, such preferred stock would increase the number of outstanding shares of our capital stock and could include terms that may deter an acquisition of us;
- limit who may call shareholder meetings;
- do not provide for cumulative voting rights; and
- provide that all vacancies may be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum, unless the vacant office is to be held by a director elected by the holders of one or more classes or series of shares entitled to vote thereon, in which case the vacancy can be filled only by the vote of the holders of such class or series.

In addition, Chapter 23B.19 of the Washington Revised Code generally limits our ability to engage in any business combination with a person who beneficially owns 10% or more of our outstanding voting stock unless certain conditions are satisfied. This restriction lasts for a period of five years following the share acquisition. These provisions may have the effect of entrenching our management team and may deprive you of the opportunity to sell your shares to potential acquirers at a premium over prevailing prices. This potential inability to obtain a control premium could reduce the price of our common stock.

ITEM 1B: UNRESOLVED STAFF COMMENTS.

None.

ITEM 2: PROPERTIES.

Our principal office is located at 12870 Interurban Avenue South, Seattle, Washington with a satellite office located in Tulsa, Oklahoma. At our principal office in Seattle, we currently lease approximately 9,425 square feet of office and laboratory space, which is suitable and adequate for our current operations, primarily under a triple net lease which expires in February 2017. Current monthly minimum rent is $11,731 and increases by approximately 3% annually. The Tulsa office agreement term is one year, terminates in August 2016, and involves de minimus rent.

ITEM 3: LEGAL PROCEEDINGS.

From time to time we may become involved in various lawsuits and legal proceedings which arise in the ordinary course of business. Litigation is subject to inherent uncertainties and an adverse result in these or other matters may arise from time to time that may harm our business. We are currently not aware of any such legal proceedings or claims that we believe will have a material adverse effect on our business, financial condition or operating results.

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.

Our common stock is listed on the NASDAQ Capital Market under the symbol "CLIR". The range of high and low closing sales prices of our common stock are presented below.

	2015		2014	
	High	Low	High	Low
First quarter	$7.62	$4.97	$11.75	$8.58
Second quarter	$5.90	$4.74	$10.90	$7.65
Third quarter	$7.23	$3.44	$9.11	$6.11
Fourth quarter	$6.41	$4.44	$8.13	$5.27

According to our transfer agent, as of March 3, 2016 we had approximately 256 shareholders of record. This number does not include an indeterminate number of shareholders whose shares are held by brokers in street name. Our stock transfer agent is VStock Transfer, LLC, 18 Lafayette Place, Woodmere, NY 11598 and their phone number is (212) 828-8436.

Dividends

We have not paid any cash dividends on our common stock since our inception and do not anticipate paying any cash dividends in the foreseeable future. We plan to retain our earnings, if any, to provide funds for the expansion of our business.

Recent Issuances of Unregistered Securities

Not applicable.

Equity Compensation Plan Information

See Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters for information about our equity compensation plans.

ITEM 6: SELECTED FINANCIAL DATA.

As a smaller reporting company, we are not required to provide this information.

ITEM 7: MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with the audited financial statements and related notes included elsewhere in this Annual Report on Form 10-K. In addition to historical information, this discussion and analysis here and throughout this Form 10-K contains forward-looking statements that involve risks, uncertainties and assumptions. Our actual results may differ materially from those anticipated in these forward-looking statements due to a number of factors, including but not limited to, the risks described in the section titled "Risk Factors".

OVERVIEW

We design and are developing technologies that aim to improve both the energy efficiency and emission control characteristics of combustion systems. Our core technologies include our Duplex and ECC technologies. Our Duplex technology uses a unique refractory tile to homogenize the flame temperature and achieve very low emissions without the need of external flue gas recirculation, selective catalytic reduction, or higher excess air operation. Our ECC technology introduces a computer-controlled electric field into a combustion system in order to better control gas-phase chemical reactions and improve system performance and cost-effectiveness. To date, our operations have been funded primarily through sales of our common stock. We have earned no significant revenue since inception on January 23, 2008. We are located in Seattle, Washington with an office in Tulsa, Oklahoma.

Plan of Operation

We are pursuing development of our technologies to enable future sales. These activities entail (i) field development projects in the case of our Duplex technology where we have successfully demonstrated our proprietary technology operating in our field testing with thermal output of up to 52 million BTU/hr, (ii) laboratory research in the case of our ECC technology where we have demonstrated certain attributes of our proprietary technology operating in our research facility with thermal output of up to 2 million BTU/hr, and (iii) business development and marketing activities with established entities that use steam generators, process heaters, boilers, solid fuel burners, and other combustion systems as well as original equipment manufacturers. We intend to continue to enter into collaborative arrangements which would enable us to work closely with established companies in targeted industries to apply solutions developed in our laboratory and field settings.

We currently have seven field test projects using our Duplex technology: two related to OTSGs in the enhanced oil recovery industry, one related to wellhead enclosed flares, and four related to process heaters in the oil refining

industry. Three of these projects are in the design phase and four are in the fieldwork stage. Our fieldwork has been successful to date in registering NOx emission levels within the specifications of the customer and relevant regulatory bodies. However, there remains certain additional fieldwork required before we can complete the installations and commissioning processes. Six of the seven field test project agreements include payments once the project is completed and the installed unit is operating to the customer's satisfaction. As each of these trials are completed, we expect to recognize small amounts of revenue. As we move forward with commercial sales of Duplex, we anticipate more traditional sales terms, but will continue to recognize the revenue only following customer acceptance. We believe that successful completion of field development projects is critical to the commercialization of a Duplex product.

Our business plan contemplates licensing our technology after we prove commercial viability and generate interest from original equipment manufacturers (OEMs). Licensing would significantly change the makeup of our revenue mix, revenue recognition, and margins. While we are currently pursuing various licensing arrangements, we have no agreements at this time and do not anticipate entering into any such agreements prior to completion of the field development projects discussed above. We believe that the continuing development of Duplex, the completion of sales and an increase in end-users will enhance our ability to license our technology.

Our initial target markets center on the energy sector, including upstream crude oil production through the use of OTSGs and wellhead enclosed flares and downstream oil refineries through the use of process heaters. In recent years, the energy sector has been significantly affected by the volatile market price of crude oil. According to the U.S. Energy Information Administration, the spot price of West Texas intermediate crude oil in the last five years has ranged from approximately $110 per barrel to approximately $25 per barrel. This has adversely effected the upstream market, but has widened margins in the refinery downstream market. Based upon historical analysis, the U.S. Bureau of Labor Statistics expects the margins in the downstream market to return to long term economic equilibrium. Regardless of the effect of crude oil prices, based upon our experience and feedback from prospective customers, we believe that the market continues to validate the appeal of our Duplex technology to oil producers due to the technology's lower emissions and the operational efficiencies that result from increased fuel efficiency and/or reduced downtime for maintenance. These operational efficiencies become more important in times of lower crude oil prices as operators become more focused on minimizing costs. Further, we believe that operators in all of our target markets are under intense pressure to meet current and proposed federal, state and local emissions standards. We believe that our Duplex technology can provide a unique, cost-effective pollution control solution for operators.

Historically, we have funded our operations through the sale of our common stock, including the following sales of common stock in the public market:

- In April and May 2012, we completed an initial public offering (IPO) of our common stock whereby we sold 3,450,000 shares of common stock at $4.00 per share, which included the exercise of the underwriter's overallotment option, resulting in gross proceeds of $13.8 million and, after deducting certain costs paid with common stock, net proceeds of $11.6 million.

- In March 2014, we completed a registered direct offering of our common stock whereby we sold 812,500 shares of common stock at $8.00 per share resulting in gross proceeds of $6.5 million and net proceeds of approximately $5.8 million.

- In February 2015, we completed an underwritten public offering of our common stock whereby we sold 2,990,000 shares of common stock at $5.85 per share resulting in gross proceeds of $17.5 million and net proceeds of approximately $16.3 million.

Our anticipated costs include employee salaries and benefits, compensation paid to consultants, materials and supplies for research, costs associated with development activities including materials, sub-contractors, travel and administration, legal expenses, sales and marketing costs, general and administrative expenses, and other costs associated with an early stage, publicly-traded technology company. We currently have 18 full-time employees and 1 part-time employee. We anticipate increasing the number of employees required to support our activities in the areas of research and development, sales and marketing, and general and administrative functions. We expect to incur consulting expenses related to technology development commensurate with our current levels and we expect to incur increasing expenses to protect our intellectual property.

The amount that we spend for any specific purpose may vary significantly, and could depend on a number of factors including, but not limited to, the pace of progress of our commercialization and development efforts, actual needs with respect to product testing, development and research, market conditions, and changes in or revisions to our marketing strategies.

Research, development, and commercial acceptance of new technologies are, by their nature, unpredictable. Although we will undertake development and commercialization efforts with reasonable diligence, there can be no assurance that the net proceeds from our securities offerings will be sufficient to enable us to develop our technology to the extent needed to create future sales to sustain operations. If the net proceeds from these offerings are insufficient for this purpose, we will consider other options to continue our path to commercialization, including, but not limited to: additional financing through follow-on equity offerings, debt financing, co-development agreements, sale or licensing of developed intellectual or other property, or other alternatives.

We cannot assure that our technology will be accepted, that we will ever earn revenues sufficient to support our operations, or that we will ever be profitable. Furthermore, we have no committed source of financing and we cannot assure that we will be able to raise money as and when we need it to continue our operations. If we cannot raise funds as and when we need them, we may be required to scale back our development plans by reducing expenditures for employees, consultants, business development and marketing efforts or to otherwise severely curtail, or even to cease, our operations.

Critical Accounting Policies

The following discussion and analysis of financial condition and results of operations is based upon our financial statements, which have been prepared in conformity with accounting principles generally accepted in the United States of America. Certain accounting policies and estimates 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, our 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, our observance of trends in the industry, information provided by our customers and information available from other outside sources, as appropriate. See Note 2 to our audited financial statements for a more complete description of our significant accounting policies.

Revenue Recognition and Cost of Revenue. Revenues from design and installation of the Company’s products are recognized on the completed contract method. Revenues from contracts and related costs of goods sold are recognized once the contract is completed or substantially completed. Contract costs include all direct material and labor costs and those indirect costs related to contract performance, such as indirect labor, supplies, and depreciation costs. Provisions for estimated losses on uncompleted contracts are made in the period in which such losses are determined.

Research and Development. The cost of research and development is expensed as incurred. Research and development costs consist of salaries, benefits, share based compensation, consulting fees, rent, utilities, depreciation, and consumables.

Stock-Based Compensation. The costs of all employee stock options, as well as other equity-based compensation arrangements, are reflected in the financial statements based on the estimated fair value of the awards on the grant date. That cost is recognized over the period during which an employee is required to provide service in exchange for the award. Stock compensation for stock granted to non-employees is determined as the fair value of the consideration received or the fair value of equity instruments issued, whichever is more reliably measured.

Fair Value of Financial Instruments. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Assets and liabilities measured at fair value are categorized based on whether or not the inputs are observable in the market and the degree that the inputs are observable. The categorization of financial assets and liabilities within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

The Company's financial instruments primarily consist of cash and cash equivalents, accounts payable and accrued expenses. As of the balance sheet dates, the estimated fair values of the financial instruments were not materially different from their carrying values as presented on the balance sheets. This is primarily attributed to the short maturities of these instruments. The Company did not identify any other non-recurring assets and liabilities that are required to be presented in the balance sheets at fair value.

Results of Operations

Comparison of the Years Ended December 31, 2015 and 2014

Revenue, Cost of Revenue, and Gross Profit. The Company reported revenue of $61,000 in 2015 earned from engineering services provided to a prospective refinery customer so that it could evaluate our Duplex technology for its application. The revenue resulted in an immaterial gross profit. No revenue was reported in 2014.

Operating Expenses. Operating expenses increased by $652,000 to $7,953,000 in 2015 compared to $7,301,000 in operating expenses in 2014, an increase of approximately 9%. The Company increased its research and development (R&D) expenses by $715,000, to $2,932,000 for 2015 compared to $2,217,000 for 2014. R&D expenses rose due

primarily to a $410,000 increase in field testing costs related to the evaluation of our Duplex technology, laboratory, and related costs, all of which totaled $794,000 in 2015 as compared to $384,000 in 2014. These costs were offset by the receipt in 2014 of $110,000 from participants in solid fuel research associated with our ECC technology. R&D expenses in 2015 also included the addition of personnel hired to support increased research activities, resulting in an increase in compensation expense of $122,000, to $1,479,000. G&A expenses decreased by $63,000, to $5,021,000 for 2015. This decrease resulted primarily from the elimination of a one–time expense incurred in 2014 in the amount of $943,000 resulting from the termination of an employment agreement with our former chief executive officer. This one-time expense was offset in 2015 by stock option and relocation costs totaling $563,000 which were associated with our current CEO's employment agreement. Also, as a result of the Company's regular review of its capitalized patent and other intangible asset costs made in connection with the preparation of the financial statements included in this report, the impairment loss was increased by $331,000 in 2015, to $593,000, due to the conclusion that it was not cost beneficial to continue to pursue certain ECC patents pending.

Loss from Operations. Due to the increase in operating expenses, our loss from operations increased during 2015 by $641,000, to $7,942,000 compared to $7,301,000 during 2014, an increase of approximately 9%.

Net Loss. Primarily as a result of the increase in operating expenses, our net loss for 2015 was $7,898,000 as compared to a net loss of $7,296,000 for 2014, resulting in a $602,000 increase in the net loss or approximately 8%.

Liquidity and Capital Resources

At December 31, 2015, our cash and cash equivalent balance totaled $10,985,000 compared to $1,845,000 at December 31, 2014, which we believe will be adequate to support our operations for at least the next 18 months. This increase resulted primarily from our underwritten public offering of 2,990,000 shares of common stock in February 2015 which resulted in net proceeds of approximately $16.3 million. This was offset by the operating costs for the year ended December 31, 2015. Although we are pursuing sales and co-development agreements, there is no assurance that they will be adequate to fund our operations and to commercialize our technology. To the extent sales and co-development agreement funding is insufficient for these purposes, we may undertake offerings of our securities, debt financing, selling or licensing our developed intellectual or other property, or other alternatives. The Company filed a Form S-3 shelf registration statement with the Securities and Exchange Commission on December 29, 2015 that was declared effective on January 7, 2016. The registration statement allows the Company to offer up to an aggregate of $30,000,000 of common stock, preferred stock, warrants or units from time to time as market conditions permit. We expect to use this equity funding to enable further investment in our technology and product development and to maintain a strong balance sheet. This information does not constitute an offer of any securities for sale.

At December 31, 2015, our current assets were in excess of current liabilities resulting in working capital of $9,564,000 compared to $719,000 at December 31, 2014. The increase in working capital resulted primarily from the $16.3 million raised in our February 2015 stock offering offset by the use of cash for operations in 2015.

Operating activities for 2015 resulted in cash outflows of $6,261,000 which were due primarily to the loss for the period of $7,898,000, offset by share based compensation from the Company’s employee and consultant equity plans of $797,000, abandonment of capitalized pending patents of $593,000, services and compensation paid with common stock of $157,000, and depreciation expense of $200,000. Operating activities for 2014 resulted in cash outflows of $5,469,000 which were due primarily to the loss for the period of $7,296,000, offset primarily by net changes in working capital, exclusive of cash, of $733,000 related to the liability associated with the termination of our former CEO, compensation paid with common stock of $222,000, share based compensation from the Company’s employee and consultant equity plans of $365,000, abandonment of capitalized pending patents in less cost beneficial jurisdictions of $262,000, and depreciation and amortization expense of $243,000.

Investing activities for 2015 and 2014 resulted in cash outflows of $1,162,000 and $1,254,000, respectively. Development of capitalized patents and other intangible assets for 2015 and 2014 resulted in cash outflows of $1,113,000 and $1,176,000, respectively. Acquisition of fixed assets for 2015 and 2014, primarily research and development equipment, resulted in cash outflows of $49,000 and $78,000, respectively.

Financing activities for 2015 resulted in $16,563,000 of cash inflows, which resulted primarily from the issuance of 2,990,000 shares of common stock at $5.85 per share for gross proceeds of $17,500,000 and net cash proceeds of $16,279,000. Additionally, we raised $284,000 through the exercise of stock options. Financing activities for 2014 resulted in $5,880,000 of cash inflows, which resulted primarily from the issuance of 812,500 shares of common stock at $8.00 per share for gross proceeds of $6,500,000 and net cash proceeds of $5,780,000. Additionally, we raised $100,000 through the exercise of stock options.

Off-Balance Sheet Transactions

We do not have any off-balance sheet transactions.

ITEM 7A: QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

As a smaller reporting company we are not required to provide this information.

ITEM 8: FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

ClearSign Combustion Corporation

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders

of ClearSign Combustion Corporation

We have audited the accompanying balance sheets of ClearSign Combustion Corporation (the "Company") as of December 31, 2015 and 2014, and the related statements of operations, stockholders' equity, and cash flows for each of the years in the two-year period ended December 31, 2015. The Company's management is responsible for these financial statements. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, 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. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2015 and 2014, and the results of its operations and its cash flows for each of the years in the two-year period ended December 31, 2015 in conformity with accounting principles generally accepted in the United States of America.

/s/ GUMBINER SAVETT INC.

March 3, 2016

Santa Monica, California

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ClearSign Combustion Corporation

Balance Sheets

	December 31, 2015	2014
ASSETS		
Current Assets:		
Cash and cash equivalents	$10,985,000	$1,845,000
Prepaid expenses	203,000	109,000
Total current assets	11,188,000	1,954,000
Fixed assets, net	123,000	263,000
Patents and other intangible assets, net	2,881,000	2,372,000
Other assets	10,000	10,000
Total Assets	$14,202,000	$4,599,000
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities:		
Accounts payable and accrued liabilities	$495,000	$253,000
Accrued compensation and taxes	1,109,000	982,000
Deferred rent	20,000	-
Total current liabilities	1,624,000	1,235,000
Long Term Liabilities:		
Long-term accrued compensation and taxes	-	372,000
Deferred rent	-	33,000
Total liabilities	1,624,000	1,640,000
Commitments		
Stockholders' Equity:		
Preferred stock, $0.0001 par value, zero shares issued and outstanding	-	-
Common stock, $0.0001 par value, 12,868,943 and 9,681,476 shares issued and outstanding at December 31, 2015 and 2014, respectively	1,000	1,000
Additional paid-in capital	41,735,000	24,218,000
Accumulated deficit	(29,158,000)	(21,260,000)
Total stockholders' equity	12,578,000	2,959,000
Total Liabilities and Stockholders' Equity	$14,202,000	$4,599,000

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

ClearSign Combustion Corporation

Statements of Operations

	For the Year Ended December 31,	
	2015	2014
Revenue	$61,000	$-
Cost of revenue	50,000	-
Gross profit	11,000	-
Operating expenses:		
Research and development	2,932,000	2,217,000
General and administrative	5,021,000	5,084,000
Total operating expenses	7,953,000	7,301,000
Loss from operations	(7,942,000)	(7,301,000)
Other income:		
Interest income	44,000	5,000
Net Loss	$(7,898,000)	$(7,296,000)
Net Loss per share - basic and fully diluted	$(0.63)	$(0.77)
Weighted average number of shares outstanding - basic and fully diluted	12,461,515	9,507,185

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

ClearSign Combustion Corporation

Statement of Stockholders' Equity

For the Years Ended December 31, 2015 and 2014

	Common Stock		Additional	Accumulated	Total Stockholders'
	Shares	Amount	Paid-In Capital	Deficit	Equity
Balances at January 1, 2014	8,810,674	$ 1,000	$ 17,751,000	$(13,964,000)	$ 3,788,000
Shares issued in registered direct offering ($8.00 per share)	812,500	-	6,500,000	-	6,500,000
Issuance costs of registered direct offering	-	-	(812,000)	-	(812,000)
Share based payments of warrants	-	-	92,000	-	92,000
Shares issued for services ($10.26 per share)	21,625	-	222,000	-	222,000
Shares issued upon exercise of options ($2.20 per share)	23,337	-	35,000	-	35,000
Shares issued upon exercise of options ($4.88 per share)	13,340	-	65,000	-	65,000
Share based compensation	-	-	365,000	-	365,000
Net loss	-	-	-	(7,296,000)	(7,296,000)
Balances at December 31, 2014	9,681,476	1,000	24,218,000	(21,260,000)	2,959,000
Shares issued in underwritten offering ($5.85 per share)	2,990,000	-	17,491,000	-	17,491,000
Issuance costs of underwritten offering	-	-	(1,212,000)	-	(1,212,000)
Shares issued for services ($5.97 per share)	23,034	-	137,000	-	137,000
Shares issued for services ($3.96 per share)	5,000	-	20,000	-	20,000
Shares issued upon exercise of options ($2.20 per share)	166,536	-	284,000	-	284,000
Shares issued upon exercise of options ($4.88 per share)	2,813	-	-	-	-
Shares issued upon exercise of options ($5.21 per share)	84	-	-	-	-
Share based compensation	-	-	797,000	-	797,000
Net loss	-	-	-	(7,898,000)	(7,898,000)
Balances at December 31, 2015	12,868,943	$ 1,000	$ 41,735,000	$(29,158,000)	$ 12,578,000

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

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ClearSign Combustion Corporation

Statements of Cash Flows

	For the Years Ended December 31,	
	2015	2014
Cash flows from operating activities:		
Net loss	$(7,898,000)	$(7,296,000)
Adjustments to reconcile net loss to net cash used in operating activities:		
Common stock issued for services	157,000	222,000
Share based payments	797,000	365,000
Depreciation and amortization	200,000	243,000
Abandonment of capitalized patents pending	593,000	262,000
Deferred rent	(13,000)	2,000
Change in operating assets and liabilities:		
Prepaid expenses	(94,000)	9,000
Accounts payable	242,000	(44,000)
Accrued compensation	(245,000)	768,000
Net cash used in operating activities	(6,261,000)	(5,469,000)
Cash flows from investing activities:		
Acquisition of fixed assets	(49,000)	(78,000)
Disbursements for patents and other intangible assets	(1,113,000)	(1,176,000)
Net cash used in investing activities	(1,162,000)	(1,254,000)
Cash flows from financing activities:		
Proceeds from issuance of common stock for cash, net of offering costs	16,279,000	5,780,000
Proceeds from exercise of stock options	284,000	100,000
Net cash provided by financing activities	16,563,000	5,880,000
Net increase (decrease) in cash and cash equivalents	9,140,000	(843,000)
Cash and cash equivalents, beginning of year	1,845,000	2,688,000
Cash and cash equivalents, end of year	$10,985,000	$1,845,000

Supplemental disclosure of non-cash operating and financing activities:

During the year ended December 31, 2015, the Company issued 40,371 shares of common stock through net settlement cashless exercises of stock options to purchase 83,775 shares from $2.20 to $5.21 per share when the closing prices on the date of exercises was a weighted average of $5.90 per share.

During the year ended December 31, 2014, the Company issued warrants to purchase 20,313 shares of common stock valued at $92,000 as part of a placement agent fee related to the March 2014 registered direct offering of common stock. Further, the Company issued 7,537 shares of common stock through a net settlement cashless exercise of stock options to purchase 10,000 shares at $2.20 per share in July 2014 when the closing price was $8.93 per share.

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

ClearSign Combustion Corporation

Notes to Financial Statements

Note 1 – Organization and Description of Business

ClearSign Combustion Corporation (ClearSign or the Company) designs and is developing technologies for the purpose of improving key performance characteristics of combustion systems, including emission and operational performance, energy efficiency and overall cost-effectiveness. The Company's primary technologies include its Duplex technology, which achieves very low emissions without the need of external flue gas recirculation, selective catalytic reduction, or higher excess air operation, and its Electrodynamic Combustion Control or ECC technology, which introduces a computer-controlled electric field into the combustion region which may better control gas-phase chemical reactions and improve system performance and cost-effectiveness. The Company is headquartered in Seattle, Washington and was incorporated in the state of Washington in 2008.

The Company's technologies are currently in field development and have generated de minimus revenues from operations to date to meet operating expenses. In order to generate meaningful revenues, the technologies must be fully developed, gain market recognition and acceptance, and develop a critical level of successful sales and product installations. The Company has historically financed its operations primarily through issuances of equity securities. The Company has incurred losses since its inception totaling $29,158,000 and expects to experience operating losses and negative cash flow for the foreseeable future. Management believes that the successful growth and operation of the Company's business is dependent upon its ability to obtain adequate sources of funding through co-development agreements, strategic partnering agreements, or equity or debt financing to adequately support research and development efforts, protect intellectual property, form relationships with strategic partners, and provide for working capital and general corporate purposes. There can be no assurance that the Company will be successful in achieving its long-term plans as set forth above, or that such plans, if consummated, will enable the Company to obtain profitable operations or continue in the long-term as a going concern.

Note 2 – Summary of Significant Accounting Policies

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the

reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Revenue Recognition and Cost of Revenue

Revenues from design and installation of the Company's products are recognized on the completed contract method. Revenues from contracts and related costs of goods sold are recognized once the contract is completed or substantially completed. Contract costs include all direct material and labor costs and those indirect costs related to contract performance, such as indirect labor, supplies, and depreciation costs. Provisions for estimated losses on uncompleted contracts are made in the period in which such losses are determined.

Cash and Cash Equivalents

Highly liquid investments purchased with an original maturity of three months or less are considered cash equivalents. Cash is maintained with a commercial bank where accounts are generally guaranteed by the Federal Deposit Insurance Corporation up to $250,000. The Company's deposits may at times exceed this limit. The Company has not experienced losses in such accounts and believes it is not exposed to any significant credit risk on cash and cash equivalents.

Fixed Assets

Fixed assets are recorded at cost. Depreciation is computed using the straight-line method over the estimated useful lives of the respective assets. Leasehold improvements are depreciated over the life of the lease or their useful life, whichever is shorter. All other fixed assets are depreciated over two to four years. Maintenance and repairs are expensed as incurred.

Patents and Trademarks

Patents and trademarks are recorded at cost. Amortization is computed using the straight-line method over the estimated useful lives of the assets once they are awarded.

Impairment of Long-Lived Assets

The Company tests long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable through the estimated undiscounted cash flows expected to result from the use and eventual disposition of the assets. In that event, a loss is recognized based on the amount by which the carrying amount exceeds the fair value of the long-lived assets. Loss on long-lived assets to be disposed of is determined in a similar manner, except that fair values are reduced for the cost of disposal.

Fair Value of Financial Instruments

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Assets and liabilities measured at fair value are categorized based on whether or not the inputs are observable in the market and the degree that the inputs are observable. The categorization of financial assets and liabilities within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

The Company's financial instruments primarily consist of cash and cash equivalents, accounts payable and accrued expenses. As of the balance sheet dates, the estimated fair values of the financial instruments were not materially different from their carrying values as presented on the balance sheets. This is primarily attributed to the short term

maturities of these instruments. The Company did not identify any other non-recurring assets and liabilities that are required to be presented in the balance sheets at fair value.

Research and Development

The cost of research and development is expensed as incurred. Research and development costs consist of salaries, benefits, share based compensation, consulting fees, rent, utilities, depreciation, and consumables. In 2015 and 2014, the Company received $15,000 and $110,000, respectively, to partially fund certain laboratory research activities. Since these funds were provided without expectation of reciprocation except notification of the research results, the Company recognized these funds when they were received and recorded them as an offset to research and development expense.

Deferred Rent

Operating lease agreements which contain provisions for future rent increases or periods in which rent payments are reduced or abated are recorded in monthly rent expense in the amount of the total payments over the lease term divided by the number of months of the lease term. The difference between rent expense recorded and the amount paid is credited or charged to deferred rent which is reflected on the accompanying balance sheets.

Income Taxes

The Company accounts for income taxes using an asset and liability approach which allows for the recognition and measurement of deferred tax assets based upon the likelihood of realization of tax benefits in future years. Under the asset and liability approach, deferred taxes are provided for the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. A valuation allowance is provided for deferred tax assets if it is more likely than not these items will either expire before the Company is able to realize their benefits, or that future deductibility is uncertain. Tax benefits from an uncertain tax position are recognized only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than 50 percent likelihood of being realized upon ultimate resolution.

Stock-Based Compensation

The costs of all employee stock options, as well as other equity-based compensation arrangements, are reflected in the financial statements based on the estimated fair value of the awards on the grant date. That cost is recognized over the period during which an employee is required to provide service in exchange for the award. Stock compensation for stock granted to non-employees is determined as the fair value of the consideration received or the fair value of equity instruments issued, whichever is more reliably measured.

Net Loss per Common Share

Basic loss per share is computed by dividing loss available to common stockholders by the weighted-average number of common shares outstanding. Diluted loss per share is computed similar to basic loss per share except that the denominator is increased to include additional common shares available upon exercise of stock options and warrants using the treasury stock method, except for periods for which no common share equivalents are included because their effect would be anti-dilutive. At December 31, 2015 and 2014, potentially dilutive shares outstanding amounted to 1,287,672 and 1,208,089, respectively.

Recently Issued Accounting Pronouncements

In February 2016, the Financial Accounting Standards Board issued Accounting Standards Update No. 2016-02 regarding leases. The new standard requires lessee recognition on the balance sheet of a right-of-use asset and a lease liability, initially measured at the present value of the lease payments. It further requires recognition in the income statement of a single lease cost, calculated so that the cost of the lease is allocated over the lease term on a generally straight-line basis. Finally, it requires classification of all cash payments within operating activities in the statement of cash flows. It is effective for fiscal years commencing after December 15, 2018 and early adoption is permitted. Management does not believe that this standard or any other recently issued, but not yet effective standards, if adopted, will have a material effect on the financial statements.

Emerging Growth Company

The Company is an emerging growth company as defined under the Jumpstart Our Business Startups Act of 2012 (JOBS Act). An emerging growth company may delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. The Company will remain an emerging growth company until December 31, 2017, although it will lose that status sooner if its revenues exceed $1 billion, if it issues more than $1 billion in non-convertible debt in a three year period, or if the market value of its common stock that is held by non-affiliates exceeds $700 million as of any June 30. At June 30, 2015, the market value of the Company’s common stock held by non-affiliates totaled $61 million.

Note 3 – Fixed Assets

Fixed assets are summarized as follows:

	December 31,	
	2015	2014
Machinery and equipment	$639,000	$646,000
Office furniture and equipment	115,000	98,000
Leasehold improvements	130,000	124,000
Accumulated depreciation and amortization	(761,000)	(605,000)
	$123,000	$263,000

Note 4 – Patents and Other Intangible Assets

Patents and other intangible assets are summarized as follows:

	December 31,	
	2015	2014
Patents		
Patents pending	$2,730,000	$2,262,000
Issued patents	115,000	67,000
	2,845,000	2,329,000
Trademarks		
Trademarks pending	18,000	36,000
Registered trademarks	23,000	-
	41,000	36,000
Other	8,000	8,000
	49,000	44,000
Patents and other intangible assets	2,894,000	2,373,000
Accumulated amortization	(13,000)	(1,000)
	$2,881,000	$2,372,000

Future amortization expense associated with awarded patents and registered trademarks as of December 31, 2015 is estimated as follows:

2016	$18,000
2017	18,000
2018	18,000
2019	18,000
2020	16,000
Thereafter	37,000
	$125,000

During the years ended December 31, 2015 and 2014, the Company recorded an impairment loss of $593,000 and $262,000, respectively, from abandonment of capitalized patents and trademarks pending.

Note 5 – Termination of Employment Agreement

The Company and its former Chief Executive Officer, Richard F. Rutkowski, entered into an agreement in December 2014 terminating a prior employment agreement. Under this agreement, Mr. Rutkowski will be paid his annual salary of $359,000 through December 31, 2016, was paid a bonus of $60,000 in 2015, has received employee benefits through December 2015, and received accelerated vesting on 15,625 stock options with an exercise price of $4.88 per share and 14,219 stock options with an exercise price of $9.90 per share. The options were not exercised prior to March 2015, therefore, pursuant to the terms of the option agreements and the ClearSign Combustion Company 2011 Equity Incentive Plan, the right to exercise the options terminated.

The following weighted-average assumptions were utilized in the calculation of the fair value of the modified stock options:

Expected life	0.25 years	
Weighted average volatility	68	%
Forfeiture rate	46	%
Weighted average risk-free interest rate	0.04	%
Expected dividend rate	-	

The liability incurred under this agreement totaled $943,000 which was recognized in general and administrative expense in 2014 and included a fair value of $50,000 attributable to the stock option provisions. At December 31, 2015, the remaining liability totaled $372,000 and is due in 2016.

Note 6 - Income Taxes

Through December 31, 2015, the Company incurred net operating losses for federal tax purposes of approximately $28,300,000. The net operating loss carry forwards may be used to reduce taxable income through the years 2028 to 2035. The availability of the Company's net operating loss carry forwards is subject to limitation if there is a 50% or more change in the ownership of the Company's stock.

A reconciliation of the expected tax computed at the statutory federal income tax rate to the provision for income taxes is as follows:

	2015	2014
Expected tax benefit at 34%	$(1,797,000)	$(2,481,000)
Change in valuation allowance	2,420,000	2,390,000
Other	(623,000)	91,000
Provision for income taxes	$-	$-

The net deferred tax asset at December 31, 2015 and 2014 was $9,500,000 and $7,080,000, respectively. A 100% valuation allowance has been established against the deferred tax assets as the utilization of the loss carry forward cannot reasonably be assured. Significant components of the deferred tax assets (liabilities), computed at the statutory federal tax rate of 34%, are approximately as follows:

	2015	2014
Net operating loss carry forwards	$9,650,000	$6,850,000
Accrued liabilities	140,000	310,000
Stock compensation	(270,000)	(20,000)
Depreciation	-	(40,000)
Prepaid expenses	(30,000)	(30,000)
Other	10,000	10,000
Deferred tax assets, net	9,500,000	7,080,000
Valuation allowance	(9,500,000)	(7,080,000)
Net deferred tax asset	$-	$-

Although the Company is not under examination, the tax years for 2012 and forward are subject to examination by United States tax authorities.

The Company's practice is to recognize interest and penalties related to income tax matters in income tax expense. As of December 31, 2015 and 2014, there was no accrued interest or penalties related to uncertain tax positions.

Note 7 – Stockholders' Equity

Common Stock and Preferred Stock

The Company is authorized to issue 62,500,000 shares of common stock and 2,000,000 shares of preferred stock. Preferences, limitations, voting powers and relative rights of any preferred stock to be issued may be determined by the Company's Board of Directors. The Company has not issued any shares of preferred stock.

In February 2015, the Company completed an underwritten public offering of common stock whereby 2,990,000 shares were issued at $5.85 per share. Gross proceeds from the offering totaled $17.5 million and net cash proceeds approximated $16.3 million. Expenses of the offering approximated $1.2 million, including underwriting fees of $1,049,000, underwriter legal fees and other costs of $55,000, and other costs of $108,000.

In March 2014, the Company completed a registered direct offering of common stock whereby 812,500 shares were issued at $8.00 per share. Gross proceeds from the offering totaled $6.5 million and net cash proceeds approximated $5.8 million. Expenses of the offering approximated $0.8 million. Cash expenses included placement agent fees of $488,000, placement agent legal and other fees of $75,000, issuer legal fees of $113,000, and other costs of $44,000. Non-cash expenses consisted of a warrant to purchase 20,313 shares of the Company's common stock at $10.00 per share exercisable until March 2019 valued at $92,000.

Equity Incentive Plan

The ClearSign Combustion Corporation 2011 Equity Incentive Plan (the Plan) provides for the granting of options to purchase shares of common stock, stock awards to purchase shares at no less than 85% of the value of the shares, and stock bonuses to officers, employees, board members, certain consultants, and advisors. The Compensation Committee of the Board of Directors is authorized to administer the Plan and establish the grant terms, including the grant price, vesting period and exercise date. As of December 31, 2015, the number of shares reserved for issuance under the Plan totaled 1,392,230 shares. The Plan provides for quarterly increases in the available number of authorized shares equal to the lesser of 10% of any new shares issued by the Company during the quarter immediately prior to the adjustment date or such lesser amount as the Board of Directors shall determine. Activity under the Plan is as follows:

	2015	2014
Reserved but unissued shares under the Plan at January 1	242,764	249,736
Increases in the number of authorized shares under the Plan	315,225	85,705
Grants of stock options	(409,200)	(141,880)
Stock option forfeitures	116,780	24,688
Exercise of stock options	212,837	39,140
Stock grants	(23,034)	(14,625)
Stock grant forfeitures	-	-
Reserved but unissued shares under the Plan at December 31	455,372	242,764

Stock Options

In 2015, the Company granted 409,200 stock options under the Plan to certain employees and a consultant, including 300,000 stock options to its Chief Executive Officer, Stephen E. Pirnat. The stock options have exercise prices based on the grant date fair values ranging from $3.96 to $5.97 per share, a contractual life of 10 years, and vest over 1-2 years in the case of Mr. Pirnat and over four years in the case of all other stock option grants. As permitted by SAB 107, due to the Company’s insufficient history of option activity, management utilized the simplified approach to estimate the options’ expected term, which represents the period of time that options granted are expected to be outstanding. Expected volatility was determined through the Company’s historical stock price volatility. The Company estimated the forfeiture rate at the time of grant and will revise it, if necessary, in subsequent periods if actual forfeitures differ from those estimates. The Company recognizes compensation costs only for those equity awards expected to vest. The risk-free rate for periods within the contractual life of the option is based on the U.S. Treasury yield in effect at the time of grant. The Company has never declared or paid dividends and has no plans to do so in the foreseeable future. The following weighted-average assumptions were utilized in the calculation of the fair value of the stock options:

Expected life	5.81 years	
Weighted average volatility	72	%
Forfeiture rate	11	%
Weighted average risk-free interest rate	1.45	%
Expected dividend rate	-	

The fair value of stock options granted, estimated on the date of grant using the Black-Scholes option valuation model, was $1,242,000 which includes $923,000 for Mr. Pirnat's stock options. The recognized compensation expense associated with these grants in 2015 was $579,000.

In 2014, the Company granted 141,880 stock options under the Plan to certain employees and consultants. The stock options have exercise prices based on the grant date fair values ranging from $8.22 to $9.90 per share, a contractual life of 10 years, and vest over four years. The following weighted-average assumptions were utilized in the calculation of the fair value of the stock options:

Expected life	6.25 years
Weighted average volatility	74 %
Forfeiture rate	13 %
Weighted average risk-free interest rate	1.93 %
Expected dividend rate	-

The fair value of stock options granted, estimated on the date of grant using the Black-Scholes option valuation model, was $799,000. The recognized compensation expense associated with these grants in 2015 and 2014 was $126,000 and $178,000, respectively.

A summary of the Company's stock option activity and related information is as follows:

	2015			2014		
	Options to Purchase Common Stock	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in years)	Options to Purchase Common Stock	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in years)
Outstanding at January 1	643,817	$ 4.46	5.67	565,765	$ 3.19	8.21
Granted	409,200	$ 5.39	9.22	141,880	$ 9.68	7.70
Exercised	(212,837)	$ 2.51	-	(39,140)	$ 3.11	-
Forfeited/Expired/Exchanged	(116,780)	$ 6.86	-	(24,688)	$ 7.36	-
Outstanding at December 31	723,400	$ 5.18	8.10	643,817	$ 4.46	5.67
Exercisable at December 31	257,391	$ 4.05	6.12	441,958	$ 3.50	4.47

In accordance with the Plan, options for the purchase of 7,504 shares of common stock were exercised in 2014 prior to vesting and the shares of common stock purchased were issued with a declining repurchase right in favor of the Company at the exercise price of $4.88 per share. The Company may repurchase shares if, prior to December 31,

2016, the employee terminates employment or certain other designated events occur. At December 31, 2015, 4,169 shares remained subject to this repurchase right.

A summary of the status of the Company's non-vested stock options at December 31 and changes during the year is as follows:

	2015		2014	
	Number of Options	Weighted Average Grant Date Fair Value	Number of Options	Weighted Average Grant Date Fair Value
Non-vested stock options at January 1	201,859	$ 6.57	248,411	$ 4.15
Granted	409,200	$ 5.39	141,880	$ 9.68
Vested	(97,367)	$ 5.16	(156,240)	$ 5.50
Exercised	-	-	(7,504)	$ 4.88
Forfeited/Expired/Exchanged	(47,683)	$ 6.88	(24,688)	$ 7.36
Non-vested stock options at December 31	466,009	$ 5.79	201,859	$ 6.57

The estimated aggregate pretax intrinsic value of the Company's outstanding vested stock options at December 31, 2015 is $381,000. The intrinsic value is the difference between the Company's common stock price and the option exercise prices multiplied by the number of in-the-money options. This amount changes based on the fair value of the Company's common stock.

At December 31, 2015, there was $910,000 of total unrecognized compensation cost related to non-vested stock option-based compensation arrangements granted under the Plan. That cost is expected to be recognized in future years as follows:

2016	$553,000
2017	260,000
2018	79,000
2019	18,000
	$910,000

The recognized compensation cost associated with the Plan is as follows:

	2015	2014
Research and development	$108,000	$99,000
General and administrative	663,000	240,000
Effect on net loss	$771,000	$339,000
Effect on net loss per share	$0.06	$0.04

Stock Grants

In 2015 and 2014, the Company granted 23,034 and 14,625 shares, respectively, of common stock under the Plan to its three independent directors in accordance with agreements for board service. The fair value of the stock at the time of grant was $5.97 and $10.26 per share for a total value of $137,000 and $150,000 in 2015 and 2014, respectively, which the Company recognized in general and administrative expense.

In 2011, the Company granted 125,000 shares of common stock under the Plan to a key employee. The shares are subject to a declining repurchase right by the Company at $0.0001 per share. The Company may repurchase shares if, prior to September 30, 2016, the employee terminates employment or certain other designated events occur. The Company recognized general and administrative compensation expense of $26,000 in each of 2015 and 2014. The remaining cost at December 31, 2015 of $20,000 is reflected as a contra-equity balance against additional paid in

capital and is expected to be recognized in 2016.

Consultant Stock Plan

The 2013 Consultant Stock Plan (the Consultant Plan) provides for the granting of shares of common stock to consultants who provide services related to capital raising, investor relations, and making a market in or promoting the Company's securities. The Company's officers, employees, and board members are not entitled to receive grants from the Consultant Plan. The Compensation Committee of the Board of Directors is authorized to administer the Consultant Plan and establish the grant terms. The number of shares reserved for issuance under the Consultant Plan on December 31, 2015 totaled 115,380 shares. The Consultant Plan provides for quarterly increases in the available number of authorized shares equal to the lesser of 1% of any new shares issued by the Company during the quarter immediately prior to the adjustment date or such lesser amount as the Board of Directors shall determine.

The Company granted 5,000 and 7,000 shares from the Consultant Plan to consultants for services in 2015 and 2014, respectively. The fair value of the stock at the time of grant was $3.96 and $10.26 per share, respectively, for a total value of $20,000 in 2015 and $72,000 in 2014 which the Company recognized in general and administrative expense.

Activity under the Consultant Plan is as follows:

	2015	2014
Reserved but unissued shares under the Consultant Plan at January 1	65,608	64,037
Increases in the number of authorized shares under the Consultant Plan	31,522	8,571
Stock grants	(5,000)	(7,000)
Stock grant forfeitures	-	-
Reserved but unissued shares under the Consultant Plan at December 31	92,130	65,608

Warrants

In conjunction with the March 2014 registered direct offering of common stock, the Company granted a warrant to the placement agent to purchase 20,313 common stock shares at $10.00 per share exercisable until March 2019. The fair value of these warrants was estimated to be $92,000 on the date of the grant using the Black-Scholes option-pricing model. Expected volatility was determined based upon the historical prices of the Company's common stock. The risk-free rate for periods within the contractual life of the warrants is based on the U.S. Treasury yield in effect at the time of grant. The Company has never declared or paid dividends and has no plans to do so in the foreseeable future. The following weighted-average assumptions were utilized for the calculations:

Expected life (in years)	5
Weighted average volatility	74 %
Weighted average risk-free interest rate	1.49%
Expected dividend rate	-

A summary of the Company's warrant activity and related information is as follows:

	2015		2014	
	Warrants	Weighted Average Exercise Price	Warrants	Weighted Average Exercise Price
Outstanding at January 1	564,272	$ 4.14	543,959	$ 3.92
Granted	-	-	20,313	$ 10.00
Exercised	-	-	-	-
Forfeited/Expired	-	-	-	-
Outstanding at December 31	564,272	$ 4.14	564,272	$ 4.14

The following table summarizes the number of warrants, the weighted average exercise price, and weighted average life (in years) by price for both total outstanding warrants and total exercisable warrants at December 31, 2015:

	Total Outstanding Warrants		
Exercise Price	Warrants	Weighted Average Exercise Price	Life (in years)
$ 1.80	80,000	$ 1.80	5.13
$ 2.20	118,959	$ 2.20	0.36
$ 5.00	345,000	$ 5.00	1.32
$ 10.00	20,313	$ 10.00	3.18
	564,272	$ 4.14	

Note 8 – Retirement Plan

The Company has a defined contribution retirement plan covering all of its employees whereby the Company matches employee contributions up to 3% of each employee's 2015 and 2014 earnings. The Company's matching contribution expense totaled $71,000 and $53,000 in 2015 and 2014, respectively.

Note 9 – Related Party Transactions

In connection with the February 2015 underwritten public offering described in Note 7, the Company paid the underwriter, MDB Capital Group, LLC (MDB), underwriting fees of $1,049,000 and underwriter legal fees and other costs of $55,000. MDB and its chief executive officer are significant beneficial owners of the Company's common stock.

Note 10 – Commitments and Contingencies

On February 3, 2015, the Company and its newly-appointed Chief Executive Officer, Stephen E. Pirnat entered into an employment agreement (the Agreement) which terminates on December 31, 2017, unless earlier terminated. Compensation under the Agreement includes an annual salary of $350,000 with annual cost-of-living adjustments, a grant of stock options as described in Note 7, annual cash bonuses that may equal up to 60% of his annual salary and equity bonuses based on performance standards established by the Compensation Committee of the Board of Directors, medical and dental benefits for Mr. Pirnat and his family, other employee benefits offered to employees generally and relocation expenses up to approximately $100,000. The Agreement may be terminated by the Company without cause under certain circumstances, as defined in the Agreement, whereby a severance payment would be due in the amount of compensation that would have been due had employment not been terminated or one year of the current annual compensation, whichever is greater. In the event of a change in control, Mr. Pirnat would receive one year's compensation and all previously granted stock options would vest in full. During the year ended December 31, 2015, the Company incurred $39,000 in relocation costs for Mr. Pirnat.

The Company has a triple net lease for office and laboratory space through February 2017. Under the terms of the lease, the Company paid no rent for the period November 2011 to February 2012 and for February 2014. Rent escalates annually by 3%. The Company records monthly rent expense equal to the total of the payments over the lease term divided by the number of months of the lease term. Therefore, rent expense of $2,000 was accrued in 2014. In 2015, the deferred rent was reduced by $13,000. Under the terms of the lease, the Company also pays monthly triple net operating costs which currently approximate $3,000 per month. Minimum future payments under the Company's lease at December 31, 2015 are as follows:

2016	$151,000
2017	24,000
	$175,000

For the years ended December 31, 2015 and 2014, rent expense amounted to $217,000 and $161,000, respectively.

The Company has a field test agreement with a customer to demonstrate and test the Duplex technology in a once through steam generator (OTSG) used to facilitate a thermally enhanced oil recovery process. Under the terms of the agreement, the Company has retrofitted an OTSG unit in order to achieve certain performance criteria. The agreement also includes time-sensitive pricing, delivery and installation terms, if elected, that will apply to future purchases of this Duplex application by this customer.

Note 11 – Quarterly Results

Quarterly results for the years ended December 31, 2015 and 2014 are as follows:

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
For the year ended December 31, 2015				
Revenue	$-	$-	$-	$61,000
Gross profit	$-	$-	$-	$11,000
Operating expenses	$1,592,000	$1,810,000	$1,969,000	$2,582,000
Net Loss	$(1,583,000)	$(1,796,000)	$(1,961,000)	$(2,558,000)
Net Loss per share - basic and fully diluted	$(0.14)	$(0.14)	$(0.15)	$(0.20)
For the year ended December 31, 2014				
Revenue	$-	$-	$-	$-
Operating expenses	$1,647,000	$1,628,000	$1,722,000	$2,304,000
Net Loss	$(1,646,000)	$(1,626,000)	$(1,721,000)	$(2,303,000)
Net Loss per share - basic and fully diluted	$(0.18)	$(0.17)	$(0.18)	$(0.24)

The Company recorded a number of adjustments in the fourth quarter of the year ended December 31, 2015 including an expense of $588,000 in 2015 described in Note 4 related to the impairment loss from the abandonment of certain capitalized patents pending.

ITEM 9: CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A: CONTROLS AND PROCEDURES

Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Securities Exchange Act of 1934, as amended (the "Act") is accumulated and communicated to the issuer's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Report on Controls and Procedures

We carried out an evaluation, under the supervision and with the participation of our management, including our chief executive officer (our principal executive officer) and our chief financial officer (our principal financial and accounting officer), of the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this report. The evaluation was undertaken in consultation with our accounting personnel. Based on that evaluation, our chief executive officer and our chief financial officer concluded that our disclosure controls and procedures are effective to ensure that information required to be disclosed by us in the reports that we file or submit under the Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms.

Report on Internal Control over Financial Reporting

Our chief executive officer and our chief financial officer are responsible for establishing and maintaining internal control over financial reporting. Internal control over financial reporting is defined in Rule 13a-15(f) and 15d-15(f) promulgated under the Act as a process designed by, or under the supervision of, our principal executive and principal financial officers and effected by our board of directors, management and other personnel, 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 and includes those policies and procedures that:

- pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets;

- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of management and our directors; and

- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Because of its inherent limitations, our internal control over financial reporting may not prevent or detect misstatements. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our chief executive officer and our chief financial officer assessed the effectiveness of our internal control over financial reporting as of December 31, 2015. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control—Integrated Framework*.

Based on our assessment, our chief executive officer and our chief financial officer determined that, as of December 31, 2015, our internal control over financial reporting is effective.

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15 (f) under the Act) during the fourth quarter of the last fiscal year that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B: OTHER INFORMATION

None.

PART III

Item 10: Directors, Executive Officers and corporate governance

The information concerning the Company's Code of Business Conduct and Ethics is set forth below in this Item 10. All other information required by this item is incorporated by reference to the Company's Proxy Statement for the 2016 Annual Meeting of Shareholders to be filed with the Securities and Exchange Commission ("SEC") within 120 days of the fiscal year ended December 31, 2015.

Code of Business Conduct and Ethics

The Board of Directors has adopted a code of business conduct and ethics (the Code) designed, in part, to deter wrongdoing and to promote honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships, full, fair, accurate, timely and understandable disclosure in reports and documents that the Company files with or submits to the Securities and Exchange Commission and in the Company's other public communications, compliance with applicable governmental laws, rules and regulations, the prompt internal reporting of Code violations to an appropriate person or persons, as identified in the Code and accountability for adherence to the Code. The Code applies to all directors, executive officers and employees of the Company. The Code may be found on the Company's website at www.clearsign.com.

The Company intends to disclose any amendments to or waivers of its code of ethics as it applies to directors or executive officers by disclosing them on Form 8-K.

Item 11: Executive Compensation

The information required by this item is incorporated by reference to the Company's Proxy Statement for the 2016 Annual Meeting of Shareholders to be filed with the SEC within 120 days of the fiscal year ended December 31, 2015.

Item 12: Security Ownership of Certain Beneficial Owners and Management AND RELATED SHAREHOLDER MATTERS

The information concerning the Company's equity compensation plan is set forth below in this Item 12. All other information required by this item is incorporated by reference to the Company's Proxy Statement for the 2016 Annual Meeting of Shareholders.

Equity Compensation Plan Information

The table below provides information as of December 31, 2015 regarding the compensation plans (2011 Equity Incentive Plan and 2013 Consultant Stock Plan) under which equity securities of ClearSign are authorized for issuance.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column a) (c)
Equity compensation plans approved by security holders	803,400	$ 4.84	455,372
Equity compensation plans not approved by security holders	-	-	-
	803,400	$ 4.84	455,372

The above schedule excludes stock grants of 213,458 and 23,250 shares under the 2011 Equity Incentive Plan and the 2013 Consultant Stock Plan, respectively.

In January 2011, the shareholders approved the ClearSign Combustion Corporation 2011 Equity Incentive Plan which provides for the granting of options to purchase shares of common stock, stock awards to purchase shares at no less than 85% of the value of the shares, and stock bonuses to officers, employees, board members, certain consultants,

and advisors. The Compensation Committee of the Board of Directors is authorized to administer the Plan and establish the grant terms, including the grant price, vesting period and exercise date. The Plan provides for quarterly increases in the available number of authorized shares equal to the lesser of 10% of any new shares issued by the Company during the quarter immediately prior to the adjustment date or such lesser amount as the Board of Directors shall determine.

In May 2013, the shareholders approved the 2013 Consultant Stock Plan which provides for the granting of shares of common stock to consultants who provide services related to capital raising, investor relations, and making a market in or promoting the Company's securities. The Company's officers, employees, and board members are not entitled to receive grants from the Consultant Plan. The Compensation Committee of the Board of Directors is authorized to administer the Consultant Plan and establish the grant terms. The Consultant Plan provides for quarterly increases in the available number of authorized shares equal to the lesser of 1% of any new shares issued by the Company during the quarter immediately prior to the adjustment date or such lesser amount as the Board of Directors shall determine.

Item 13: Certain Relationships and Related Transactions, AND DIRECTOR INDEPENDENCE

The information required by this item is incorporated by reference to the Company's Proxy Statement for the 2016 Annual Meeting of Shareholders to be filed with the SEC within 120 days of the fiscal year ended December 31, 2015.

ITEM 14: PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this item is incorporated by reference to the Company's Proxy Statement for the 2016 Annual Meeting of Shareholders to be filed with the SEC within 120 days of the fiscal year ended December 31, 2015.

PART IV

Item 15. Exhibits, Financial Statement Schedules

15(a) (1) **Financial Statements**

The financial statements filed as part of this report are listed and indexed in the table of contents. Financial statement schedules have been omitted because they are not applicable or the required information has been included elsewhere in this report.

15(a) (2) **Financial Statement Schedules**

Not applicable.

15 (a) (3) **Exhibits**

The exhibits filed as part of this Annual Report on Form 10-K are listed in the Exhibit Index immediately preceding the exhibits. The Company has identified in the Exhibit Index each management contract and compensation plan filed as an exhibit to this Annual Report on Form 10-K in response to Item 15(a) (3) of Form 10-K.

Exhibit No.	Description of Document
3.1	Articles of Incorporation of ClearSign Combustion Corporation, amended on February 2, 2011 (1)
3.1.1	Articles of Amendment to Articles of Incorporation of ClearSign Combustion Corporation filed on December 22, 2011 (1)
3.2	Bylaws of ClearSign Combustion Corporation (1)
4.1	Form of Common Stock Certificate (7)
4.2	Form of Common Stock Purchase Warrant issued to MDB Capital Group LLC on April 24, 2012 (1)
4.3	Form of Common Stock Purchase Warrant issued on February 16, 2011 to various consultants (1)
4.4	Warrant issued to Brean Capital LLC on March 5, 2014 (4)
10.1	Form of Lock-Up Agreement dated February 4, 2015 executed by MDB Capital Group, LLC (7)
10.2	Office Lease Agreement (1)
10.3	Form of Confidentiality and Proprietary Rights Agreement (7)
10.4	ClearSign Combustion Corporation 2011 Equity Incentive Plan (1)
10.5	Form of Director and Officer Indemnification Agreement (1)+
10.6	Employment Agreement dated February 3, 2015 between the registrant and Stephen E. Pirnat (5)+
10.7	ClearSign Combustion Corporation 2013 Consultant Stock Plan (2)
10.8	Amendment dated March 10, 2014 to Employment Agreement between the registrant and Richard F. Rutkowski (4)+
10.9	Placement Agency Agreement dated February 27, 2014 between the registrant and Brean Capital, LLC (3)
10.10	Form of Subscription Agreement dated March 5, 2014 (3)
10.11	Form of Lock-Up Agreement dated March 5, 2014 (4)
10.12	First Amendment to Office Lease Agreement dated December 17, 2013 (4)
10.13	Separation, Severance and Release Agreement dated December 10, 2014 between the registrant and Richard F. Rutkowski (6)+
23.1	Consent of Gumbiner Savett Inc., Independent Registered Public Accounting Firm*
31.1	Certification of the Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002*
31.2	Certification of the Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002*
32.1	Certification of the Principal Executive Officer and Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**
101.INS	XBRL Instance Document*
101.SCH	XBRL Taxonomy Extension Schema*
101.CAL	XBRL Taxonomy Extension Calculation Linkbase*
101.DEF	XBRL Taxonomy Extension Definition Linkbase*
101.LAB	XBRL Taxonomy Extension Label Linkbase*
101.PRE	XBRL Taxonomy Extension Presentation Linkbase*

*Filed herewith.

**Furnished herewith.

+Agreement with management.

(1) Incorporated by reference from the registrant's registration statement on Form S-1, as amended, file number 333-177946, originally filed with the Securities and Exchange Commission on November 14, 2011.

(2) Incorporated by reference from the registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2013, filed with the Securities and Exchange Commission on May 6, 2013.

(3) Incorporated by reference from the registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on February 28, 2014.

(4) Incorporated by reference from the registrant's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 11, 2014.

(5) Incorporated by reference from the registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on February 5, 2015.

(6) Incorporated by reference from the registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on December 12, 2014.

(7) Incorporated by reference from the registrant's Annual Report on Form 10-K filed with the Securities and Exchange Commission on February 26, 2015.

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.

CLEARSIGN COMBUSTION CORPORATION

Date: March 3, 2016 By: /s/ Stephen E. Pirnat
Stephen E. Pirnat
Chief Executive Officer

Date: March 3, 2016 By: /s/ James N. Harmon

James N. Harmon

Chief Financial 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.

Date: March 3, 2016 /s/ Stephen E. Pirnat
Stephen E. Pirnat
Chief Executive Officer and Director
(Principal Executive Officer)

Date: March 3, 2016 /s/ James N. Harmon
James N. Harmon
Chief Financial Officer
(Principal Financial and Accounting Officer)

Date: March 3, 2016 /s/ Lon E. Bell
Lon E. Bell, Ph.D., Director

Date: March 3, 2016 /s/ David B. Goodson
David B. Goodson, Director

Date: March 3, 2016 /s/ Scott P. Isaacson
Scott P. Isaacson, Director

Date: March 3, 2016 /s/ Jeffrey L. Ott
Jeffrey L. Ott, Director

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