

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

Amendment No. 2

to

**FORM S-1**

REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933

**AQUA METALS, INC.**  
(Exact name of registrant as specified in its charter)

<b>Delaware</b> (State or other jurisdiction of incorporation or organization)	<b>3691</b> (Primary Standard Industrial Classification Code Number)	<b>47-1169572</b> (I.R.S. Employer Identification No.)
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**501 23<sup>rd</sup> Avenue**  
**Oakland, California 94606**  
**(510) 479-7635**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**Stephen R. Clarke**  
**Chief Executive Officer**  
**Aqua Metals, Inc.**  
**501 23<sup>rd</sup> Avenue,**  
**Oakland, California 94606**  
**(510) 479-7635**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

**Copies to:**

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**Approximate date of commencement of proposed sale to the public: As soon as practicable after this registration statement becomes effective.**

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

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

Large accelerated filer <input type="checkbox"/>	Non-accelerated filer <input type="checkbox"/> (Do not check if a smaller reporting company)	Accelerated filer <input type="checkbox"/>	Smaller reporting company <input checked="" type="checkbox"/>
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## CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price <sup>(1)(2)</sup>	Amount of Registration Fee
Common Stock, \$0.001 par value per share	\$ 34,500,000	\$ 4,008.90
Underwriters' Warrant <sup>(3)(4)(5)</sup>	\$ 100	—
Shares of Common Stock underlying Underwriters' Warrant	\$ 4,140,000	\$ 481.07

- (1) Estimated solely for the purpose of computing the amount of the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.
- (2) Includes the aggregate offering price of additional shares that the underwriters have the option to purchase to cover over-allotments, if any.
- (3) No registration fee required pursuant to Rule 457(g) under the Securities Act of 1933.
- (4) Registers a warrant to be granted to the underwriters for an amount equal to 10% of the number of the shares sold to the public. See "Underwriting" on page 43 of the prospectus contained within this registration statement for information on underwriting arrangements relating to this offering.
- (5) Pursuant to Rule 416 under the Securities Act of 1933, this registration statement shall be deemed to cover the additional securities (i) to be offered or issued in connection with any provision of any securities purported to be registered hereby to be offered pursuant to terms which provide for a change in the amount of securities being offered or issued to prevent dilution resulting from stock splits, stock dividends, or similar transactions and (ii) of the same class as the securities covered by this registration statement issued or issuable prior to completion of the distribution of the securities covered by this registration statement as a result of a split of, or a stock dividend on, the registered securities.

**The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment, which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.**

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THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. THESE SECURITIES MAY NOT BE SOLD UNTIL THE REGISTRATION STATEMENT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND WE ARE NOT SOLICITING AN OFFER TO BUY THESE SECURITIES IN ANY STATE WHERE THE OFFER OR SALE IS NOT PERMITTED.

SUBJECT TO COMPLETION, DATED JULY 20, 2015

## 6,000,000 Shares of Common Stock



Aqua Metals, Inc. is offering 6,000,000 shares of common stock on a firm commitment basis. This is an initial public offering of our common stock and there is presently no public market for our common stock. The initial public offering price is \$5.00 per share. The shares offered hereby will be listed for trading upon the Nasdaq Capital Market under the symbol "AQMS."

We have agreed to pay the underwriters a selling discount of \$2.4 million, or 8%, of the gross proceeds of this offering. We have also agreed to issue to the underwriters warrants to purchase shares of our common stock in an amount up to 10% of the shares of common stock sold in the public offering, with an exercise price equal to 120% of the public offering price.

**We are an "emerging growth company" under the federal securities laws and will have the option to use reduced public company reporting requirements. Please see "Risk Factors" beginning on page 6 to read about certain factors you should consider before buying our securities.**

**Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.**

	<u>Price to Public</u>	<u>Underwriting Discounts and Commissions<sup>(1)</sup></u>	<u>Proceeds to Aqua Metals</u>
Per Share	\$ 5.00	\$ 0.40	\$ 4.60
Total Offering	\$ 30,000,000	\$ 2,400,000	\$ 27,600,000

(1) See "Underwriting" for a description of the compensation payable to the underwriters. Excludes a non-accountable expense allowance of \$185,000 payable to the underwriters.

The underwriters may also purchase an additional 900,000 shares of our common stock amounting to 15% of the number of shares offered to the public, within 45 days of the date of this prospectus, to cover over-allotments, if any, on the same terms set forth above.

The underwriters expect to deliver the shares on or about \_\_\_\_\_, 2015.

*Book Running Manager*

## National Securities Corporation

*Co-Manager*

## Northland Capital Markets

The date of this prospectus is \_\_\_\_\_, 2015

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Neither we nor the underwriters have authorized anyone to provide any information or make any representations other than those contained in this prospectus or in any free writing prospectus prepared by or on behalf of us or to which we have referred you. Neither we nor the underwriters take responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We are offering to sell, and seeking offers to buy, shares of common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of the common stock.

Through and including \_\_\_\_\_, 2015 (the 25<sup>th</sup> day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

For investors outside of the United States: Neither we nor the underwriters have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States are required to inform themselves about, and to observe any restrictions relating to, this offering and the distribution of this prospectus outside of the United States.

## PROSPECTUS SUMMARY

*Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below, together with all of the other information in this prospectus, including our consolidated financial statements and related notes, before investing in our common stock. If any of the following risks materialize, our business, financial condition, operating results and prospects could be materially and adversely affected. In that event, the price of our common stock could decline, and you could lose part or all of your investment.*

*On June 25, 2015, we effected a 1-for-1.10 reverse split of our common stock. All historical share amounts and share price information presented in this prospectus have been proportionally adjusted to reflect the impact of this reverse stock split.*

*All references in this prospectus to “metric ton” or “tonne” refer to a metric ton, which is equal to approximately 2,204.6 pounds.*

## OUR COMPANY

### Overview

We are engaged in the business of recycling lead through a novel, proprietary and patent-pending process that we developed and named “AquaRefining”. AquaRefining uses a novel electro-chemical process to produce pure lead (greater than 99.99% purity) recovered from used lead acid batteries. We believe that AquaRefining offers a significant reduction in production cost over smelting, which is the existing method of producing lead. We also believe that AquaRefining significantly reduces the environmental emissions, health concerns and the permitting, logistics and transport challenges associated with lead smelting. We believe that the combined advantages offered by the AquaRefining process represent a potential step change in lead recycling technology, one which can deliver advantages in economics, footprint and logistics while greatly reducing the environmental impact of lead recycling.

Lead is a globally traded commodity with a worldwide market value in excess of \$20 billion. The chemical properties of lead allow it to be recycled and reused indefinitely. At the same time, most lead mines have become exhausted. Consequently and coupled with rising global demand for lead, recycled lead now makes up approximately 57% of all lead produced worldwide. In many countries, including the US, this percentage is even higher. The main source of recycled lead is lead acid batteries, or LABs, the production of which also represents the majority of the demand for lead.

To date, all lead, both mined and recycled, has been produced through lead smelting, which is an inefficient, wasteful, energy intensive and often highly polluting process. As a consequence of its environmental and health issues, smelting has become increasingly regulated in developed countries. Consequently, the lead smelting industry is migrating to more isolated areas and countries with less stringent regulations. The resulting transportation of used LABs from where they originate in the US to smelters in Mexico and other countries with limited environmental controls represents an increasingly significant cost to recycled lead and new LAB production.

We believe that AquaRefining significantly reduces the permitting, environmental and health issues associated with lead smelting. On this basis, we believe we have the potential to locate multiple smaller facilities closer to the source of used LABs. If this “distributed recycling” approach proves to be possible, we believe it will further enhance the economics of AquaRefining over smelting by reducing transport costs and supply chain bottlenecks. We have entered into formal discussions with three separate suppliers of used LABs. Each of these suppliers has the ability to supply enough used LABs to operate our initial recycling facility at 80 metric tons of produced lead per day and has expressed a desire to do so. Based on these formal discussions and our understanding of the market for used LABs, we believe that used LABs should be readily available to us from a number of sources at competitive prices.

Our primary goal is to monetize the potential multiple advantages that AquaRefining provide over lead smelting. In North America and Europe, we intend to build and operate recycling facilities close to major centers of LAB distribution. We also plan to form partnerships in which we will provide AquaRefining modules to augment or replace smelting operations. In each case, AquaRefining modules will be manufactured, assembled and tested in our own separate and purpose-built facility located near Oakland, California.

The modular nature of AquaRefining makes it possible to start lead production at a much smaller scale than is possible with smelters, thereby significantly reducing the investment risk associated with building a conventional smelter-based lead production facility. Our plan is to actively explore distributed recycling in the US by establishing our own initial recycling operation near Reno, Nevada. This plan is based on our belief that Reno is a hub of the West Coast’s distribution infrastructure

and yet very poorly served by LAB recycling. From our initial and scalable recycling facility near Reno, we intend to expand first throughout the US and then overseas. We will seek to own our own recycling facilities but will also evaluate joint ventures, licensing and direct sales.

#### **2014 Private Placement Convertible Promissory Notes**

In October 2014, we issued \$6 million in senior secured convertible promissory notes that bear simple interest at 6% per year. All interest and principal under the notes must be paid or converted into shares of our common stock on or before December 31, 2015. We refer to these promissory notes in this prospectus as our “convertible notes.” Pursuant to the terms of our convertible notes, all principal and accrued interest under the notes will automatically convert into shares of our common stock concurrent with the completion of this offering, at the conversion price of 50% of the initial public offering price, provided, however, in no event shall the conversion price be greater than \$2.50 nor less than \$1.67 per share. Assuming that this offering was completed on March 31, 2015 at a price of \$5.00 per share, and based on interest accrued through such date in the amount of \$154,356, the convertible notes would have been converted into 2,461,743 shares of our common stock.

#### **Risks Related to Our Business**

Our business is subject to numerous risks, which are highlighted in the section entitled “Risk Factors” immediately following this prospectus summary. Some of these risks include:

- since we have a limited operating history, it is difficult for potential investors to evaluate our business;
- we are a development stage company, have not yet commenced revenue producing operations and may never achieve or maintain profitability;
- the report of our independent registered public accounting firm for the fiscal year ended December 31, 2014 states that due to our development stage status, lack of revenue and dependence upon future sources of equity or debt financing there is substantial doubt about our ability to continue as a going concern;
- we may need additional financing in addition to the proceeds of this offering to execute our business plan and fund operations, which additional financing may not be available on reasonable terms or at all;
- our proprietary technologies and processes are not yet verified on a commercial scale;
- we have applied for but currently do not hold any patents for our proprietary technologies or processes;
- our proprietary rights may be difficult to enforce, which could enable others to copy or use aspects of our solution without compensating us, thereby eroding our competitive advantages and harming our business;
- we may be subject to intellectual property rights claims by third parties, which are extremely costly to defend, could require us to pay significant damages and could limit our ability to use certain technologies;
- our business strategy includes licensing arrangements and entering into joint ventures and strategic alliances, and our failure to successfully integrate such licensing arrangements, joint ventures or strategic alliances into our operations could adversely affect our business;
- our success will require timely expansion of our operations and if we are unable to manage future expansion effectively, our business, operations and financial condition may suffer significantly, resulting in decreased productivity; and
- government regulation and environmental concerns may adversely affect our business.

For further discussion of these and other risks you should consider before making an investment in our common stock, see the section titled “Risk Factors” immediately following this prospectus summary.

#### **Corporate Information**

Aqua Metals, Inc. was incorporated in Delaware on June 20, 2014. Our offices are located at 501 23<sup>rd</sup> Avenue, Oakland, California 94606 and our telephone number is (510) 479-7635. Our website is [www.aquametals.com](http://www.aquametals.com). Information contained

in, or accessible through, our website does not constitute part of this prospectus and inclusions of our website address in this prospectus are inactive textual references only.

Unless otherwise indicated, the terms “Aqua Metals”, “Company”, “we,” “us,” and “our” refer to Aqua Metals, Inc. and its wholly-owned subsidiaries.

“Aqua Metals”, “AquaRefining” and Aqua Metals logo are our trademarks. This prospectus contains additional trade names, trademarks and service marks of ours and of other companies. We do not intend our use or display of other companies’ trade names, trademarks, or service marks to imply a relationship with these other companies, or endorsement or sponsorship of us by these other companies. Other trademarks appearing in this prospectus are the property of their respective holders.

### **Emerging Growth Company**

The Jumpstart Our Business Startups Act, or the JOBS Act, was enacted in April 2012 with the intention of encouraging capital formation in the United States and reducing the regulatory burden on newly public companies that qualify as “emerging growth companies.” We are an emerging growth company within the meaning of the JOBS Act. As an emerging growth company, we may take advantage of certain exemptions from various public reporting requirements, including:

- the requirement that our internal control over financial reporting be attested to by our independent registered public accounting firm pursuant to Section 404 of the Sarbanes-Oxley Act of 2002;
- certain requirements related to the disclosure of executive compensation in this prospectus and in our periodic reports and proxy statements;
- the requirement that we hold a nonbinding advisory vote on executive compensation and any golden parachute payments; and
- the ability to delay compliance with new or revised financial accounting standards until private companies are required to comply with the new or revised financial accounting standard.

We may take advantage of the exemptions under the JOBS Act discussed above until we are no longer an emerging growth company. We will remain an emerging growth company until the earliest to occur of (1) the last day of the fiscal year in which we have \$1.0 billion or more in annual revenue; (2) the date we qualify as a “large accelerated filer,” with at least \$700 million of equity securities held by non-affiliates; (3) the date on which we have issued, in any three-year period, more than \$1.0 billion in non-convertible debt securities; or (4) the last day of the fiscal year ending after the fifth anniversary of our initial public offering.

We may choose to take advantage of some, but not all, of the available benefits under the JOBS Act. We are choosing to irrevocably “opt out” of the extended transition periods available under the JOBS Act for complying with new or revised accounting standards, but we intend to take advantage of the other exemptions discussed above. Accordingly, the information contained herein and in our subsequent filing with the Securities and Exchange Commission may be different than the information you receive from other public companies in which you hold stock.

For certain risks related to our status as an emerging growth company, see the disclosure elsewhere in this prospectus under “Risk Factors—Risks Related to this Offering and Owning Our Common Stock - 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.”



## THE OFFERING

Common stock offered by us	6,000,000 shares
Common stock to be outstanding after this offering	12,825,384 shares
Over-allotment option offered by us	900,000 shares
Proposed Nasdaq symbol	“AQMS”
Use of proceeds	Construction of a lead recycling facility near Reno, Nevada; tenant improvements and equipment for new office and manufacturing facility in California; patent filings; and general working capital

The number of shares of our common stock to be outstanding after this offering is based on 6,825,384 shares of our common stock outstanding as of March 31, 2015 (including 4,363,641 shares of common stock outstanding as of the date of this prospectus and 2,461,743 shares common stock issuable upon conversion of our convertible notes as of March 31, 2015), and excludes:

- 584,547 shares of our common stock issuable upon exercise of outstanding options granted pursuant to our 2014 Stock Incentive Plan;
- 682,540 shares of our common stock issuable upon exercise of outstanding warrants;
- up to 900,000 shares issuable pursuant to the underwriters’ over-allotment option;
- 779,090 shares of our common stock reserved for future grants pursuant to our 2014 Stock Incentive Plan; and
- the shares of our common stock issuable upon exercise of the underwriters’ warrant.

Except as otherwise indicated, all information in this prospectus assumes:

- the automatic conversion of \$6.0 million principal amount of our convertible notes, and \$154,356 of accrued interest thereon as of March 31, 2015, into an aggregate of 2,461,743 shares of common stock effective upon the completion of this offering;
- no exercise of outstanding warrants or options subsequent to March 31, 2015; and
- no exercise of the underwriters’ over-allotment option.

### Summary Consolidated Financial Data

The following tables summarize our consolidated financial data. You should read this summary consolidated financial data together with the section entitled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and related notes that are included elsewhere in this prospectus. The consolidated financial information as of and for the period from inception (June 20, 2014) through December 31, 2014 is derived from the audited consolidated financial statements that are included elsewhere in this prospectus. The consolidated financial information as of March 31, 2015 and for the three month period ended March 31, 2015 is derived from our unaudited consolidated financial statements that are included elsewhere in this prospectus. The unaudited consolidated financial statements were prepared on a basis consistent with our audited consolidated financial statements and include, in management’s opinion, all adjustments, consisting only of normal recurring adjustments that we consider necessary for a fair presentation of the financial information set forth in those statements. Our historical results are not necessarily indicative of the results that may be expected in the future, and our interim results are not necessarily indicative of the results to be expected for the full year or any other period.

	<u>From Inception (June 20, 2014) through December 31, 2014</u>	<u>Three Months Ended March 31, 2015</u> (unaudited)
<b>Consolidated Statement of Operations Data:</b>		
Revenues	\$ —	\$ —
Net loss	(2,373,751)	(4,898,651)

	<u>March 31, 2015</u>		
	<u>Actual</u>	<u>Pro Forma<sup>(1)</sup></u>	<u>Pro Forma as Adjusted<sup>(2)</sup></u>
	(unaudited)	(unaudited)	(unaudited)
<b>Consolidated Balance Sheet Data:</b>			
Cash and cash equivalents	\$ 3,685,803	\$ 3,685,803	\$ 30,685,803
Working capital (deficit)	\$ (1,735,764)	\$ 3,736,534	\$ 30,736,534
Total assets	\$ 5,214,155	\$ 5,214,155	\$ 32,214,155
Convertible notes	\$ 5,317,942	\$ —	\$ —
Total stockholders’ (deficit) equity	\$ (5,669,507)	\$ 4,572,308	\$ 31,572,309

- (1) The pro forma column reflects (i) the automatic conversion of \$6.0 million principal amount, net, of our convertible notes, and \$154,356 of accrued interest thereon as of March 31, 2015, into an aggregate of 2,461,743 shares of common stock and reclassified into common stock and additional paid in capital; (ii) the immediate expense of \$682,058 in unamortized debt discount; and (iii) the reclassification of \$4,769,518 of derivative liability related to our convertible notes to additional paid-in capital.
- (2) The pro forma as adjusted column reflects all adjustments included in the pro forma column and gives effect to the sale by us of 6,000,000 shares of common stock offered by this prospectus at the initial public offering price of \$5.00 per share, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

## RISK FACTORS

*Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below, together with all of the other information in this prospectus, including our consolidated financial statements and related notes, before investing in our common stock. If any of the following risks materialize, our business, financial condition, operating results and prospects could be materially and adversely affected. In that event, the price of our common stock could decline, and you could lose part or all of your investment.*

### Risks Relating to Our Business

*Since we have a limited operating history and have not commenced revenue-producing operations, it is difficult for potential investors to evaluate our business.* We formed our corporation in June 2014 and have not commenced revenue-producing operations. To date, our operations have consisted of the development and limited testing of our AquaRefining process and the development of our business plan. Our limited operating history makes it difficult for potential investors to evaluate our technology or prospective operations. As an early stage company, we are subject to all the risks inherent in the initial organization, financing, expenditures, complications and delays in a new business. Investors should evaluate an investment in us in light of the uncertainties encountered by developing companies in a competitive environment. There can be no assurance that our efforts will be successful or that we will ultimately be able to attain profitability.

*We may need additional financing to execute our business plan and fund operations, which additional financing may not be available on reasonable terms or at all.* As of March 31, 2015, we had total assets of \$5,214,155 and a working capital deficit of \$1,735,764. We believe that we require a minimum of \$26 million of capital over the next 12 months in order to fund our current business plan, including the development of our initial recycling facility near Reno, Nevada. We have undertaken this initial public offering of our common shares to acquire the necessary capital. However, we may require additional capital over the next 12 months, the receipt of which there can be no assurance. In addition, we will require additional capital in order to fund our proposed development of additional AquaRefining recycling facilities. We intend to seek additional funds through various financing sources, including the private sale of our equity and debt securities, licensing fees for our technology, joint ventures with capital partners and project financing of our recycling facilities. In addition, we will consider alternatives to our current business plan that may enable to us to achieve revenue producing operations and meaningful commercial success with a smaller amount of capital. However, there can be no guarantees that such funds will be available on commercially reasonable terms, if at all. If such financing is not available on satisfactory terms, we may be unable to further pursue our business plan and we may be unable to continue operations, in which case you may lose your entire investment.

The report of our independent registered public accounting firm for the fiscal year ended December 31, 2014 states that due to our development stage status, lack of revenue and dependence upon future sources of equity or debt financing there is substantial doubt about our ability to continue as a going concern.

*Our business model is new and has not been proven by us or anyone else.* We intend to engage in the business of producing recycled lead through a proprietary, patent-pending electro-chemical technology. While the production of recycled lead is an established business, to date all recycled lead has been produced by way of traditional smelting processes. To our knowledge, no one has successfully produced recycled lead in commercial quantities other than by way of smelting. We have tested our AquaRefining process on a small scale and to a limited degree, however there can be no assurance that we will be able to produce lead in commercial quantities at a cost of production that will provide us with an adequate profit margin. The uniqueness of our AquaRefining process presents potential risks associated with the development of a business model that is untried and unproven.

*While the testing of our AquaRefining process has been successful to date, there can be no assurance that we will be able to replicate the process, along with all of the expected economic advantages, on a large commercial scale.* As of the date of this prospectus, we have built and operated both a small-scale unit of our AquaRefining process and a full size production prototype. Through the operation of such units we have successfully produced 99.99% pure lead on a limited scale. While we believe that our development and testing to date has proven the concept of our AquaRefining process, we have not undertaken the build-out or operation of a large-scale facility capable of recycling LABs and producing lead in large commercial quantities. We intend to apply a portion of the proceeds of this offering towards the development and installation of the manufacturing process for our large-scale AquaRefining modules. There can be no assurance that we commence large scale manufacturing or operations that we will not incur unexpected costs or hurdles that might restrict the desired scale of our intended operations or negatively impact our projected gross profit margin.

***Our intellectual property rights may not be adequate to protect our business.*** We currently do not hold any patents for our products. To date, we have filed eight U.S. patent applications, of which six are provisional applications, relating to certain elements of the technology underlying our AquaRefining process and related apparatus and chemical formulations. Although we expect to continue filing, where applicable, patent applications related to our technology, no assurances can be given that any patent will be issued on our patent applications or any other application that we may file in the future or that, if such patents are issued, they will be sufficiently broad to adequately protect our technology. In addition, we cannot assure you that any patents that may be issued to us will not be challenged, invalidated, or circumvented.

Even if we are issued patents, they may not stop a competitor from illegally using our patented processes and materials. In such event, we would incur substantial costs and expenses, including lost time of management in addressing and litigating, if necessary, such matters. Additionally, we rely upon a combination of trade secret laws and nondisclosure agreements with third parties and employees having access to confidential information or receiving unpatented proprietary know-how, trade secrets and technology to protect our proprietary rights and technology. These laws and agreements provide only limited protection. We can give no assurance that these measures will adequately protect us from misappropriation of proprietary information.

***Our processes may infringe on the intellectual property rights of others, which could lead to costly disputes or disruptions.*** The applied science industry is characterized by frequent allegations of intellectual property infringement. Though we do not expect to be subject to any of these allegations, any allegation of infringement could be time consuming and expensive to defend or resolve, result in substantial diversion of management resources, cause suspension of operations or force us to enter into royalty, license, or other agreements rather than dispute the merits of such allegation. If patent holders or other holders of intellectual property initiate legal proceedings, we may be forced into protracted and costly litigation. We may not be successful in defending such litigation and may not be able to procure any required royalty or license agreements on acceptable terms or at all.

***Our business strategy includes licensing arrangements and entering into joint ventures and strategic alliances. Failure to successfully integrate such licensing arrangements, joint ventures, or strategic alliances into our operations could adversely affect our business.*** We propose to commercially exploit our AquaRefining process, in part, by licensing our technology to third parties and entering into joint ventures and strategic relationships with parties involved in the manufacture and recycling of LABs. Licensing programs, joint ventures and strategic alliances may involve significant other risks and uncertainties, including distraction of management's attention away from normal business operations, insufficient revenue generation to offset liabilities assumed and expenses associated with the transaction, and unidentified issues not discovered in our due diligence process, such as product quality, technology issues and legal contingencies. In addition, we may be unable to effectively integrate any such programs and ventures into our operations. Our operating results could be adversely affected by any problems arising during or from any licenses, joint ventures or strategic alliances.

***If we are unable to manage future expansion effectively, our business, operations and financial condition may suffer significantly, resulting in decreased productivity.*** If our AquaRefining process proves to be commercially valuable, it is likely that we will experience a rapid growth phase that could place a significant strain on our managerial, administrative, technical, operational and financial resources. Our organization, procedures and management may not be adequate to fully support the expansion of our operations or the efficient execution of our business strategy. If we are unable to manage future expansion effectively, our business, operations and financial condition may suffer significantly, resulting in decreased productivity.

***Certain industry participants may have the ability to restrict our access to used LABs and otherwise focus significant competitive pressure on us.*** We believe that our primary competition will come from operators of existing smelters and other parties invested in the existing supply chain for smelting, both of which may resist the change presented by our AquaRefining process. Competition from such incumbents may come in the form of restricted access to used LABs. We believe that LAB manufacturers who also maintain their own smelting operations control approximately 50% of the market for used LABs. We will require access to used LABs at market prices in order to carry out our business plan. If those LAB manufacturers and others involved in the reverse supply chain for used LABs attempt to restrict our access to used LABs, that may adversely affect our prospects and future growth. There can be no assurance that we will be able to effectively withstand the pressures applied by our competition.

***We may experience significant fluctuations in raw material prices and the price of our principal product, either of which could have a material adverse effect on our liquidity, growth prospects and results of operations.*** Spent LAB's are our primary raw material and we believe that in recent years the cost of used LABS has been volatile at times. Our principal product, recycled lead, has also experienced price volatility from time to time as well. For example, the market price of lead on the London Metal Exchange, or LME, rose from a trading range of \$1,000 to \$1,200 per metric ton during 2005 to \$2,200 per metric ton during 2014. However, between mid-2014 and March 2015, the LME market price for lead decreased

to approximately \$1,792 per metric ton, as a result of the global economic conditions that contributed to the decline in oil and commodity prices generally, before increasing to a recent high of \$2,139 per metric ton as of May 5, 2015. The average spot price of lead on the LME over the period March 1, 2015 to May 31, 2015 was \$1,929 per metric ton. While we intend to pursue supply and tolling arrangements and hedge transactions as appropriate to offset any price volatility, the volatile nature of prices for used LABs and recycled lead could have an adverse impact on our liquidity, growth prospects and results of operations.

***The global economic conditions could negatively affect our prospects for growth and operating results.*** Our prospects for growth and operating results will be directly affected by the general global economic conditions of the industries in which our suppliers, partners and customer groups operate. We believe that the market price of our principal product, recycled lead, is relatively volatile and reacts to general global economic conditions. For example, the market price of lead on the LME declined from \$2,237 per metric ton as of August 31, 2014 to approximately \$1,792 per metric ton as of March 31, 2015, before increasing to a recent high of \$2,139 per metric ton as of May 5, 2015. The decrease was caused, in our opinion, by an oversupply of lead resulting from a global economic slowdown and the other global economic conditions that contributed to the decrease in the price of oil and commodities generally. The average spot price of lead on the LME over the period March 1, 2015 to May 31, 2015 was \$1,929 per metric ton. Our business will be highly dependent on the economic and market conditions in each of the geographic areas in which we operate. These conditions affect our business by reducing the demand for LABs and decreasing the price of lead in times of economic down turn and increasing the price of used LABs in times of increasing demand of LABs and recycled lead. There can be no assurance that global economic conditions will not, at times, negatively impact our liquidity, growth prospects and results of operations.

***We are subject to the risks of conducting business outside the United States.*** A part of our strategy involves our pursuit of growth opportunities in certain international market locations. We intend to pursue the development and ownership of recycling facilities in certain foreign jurisdictions, including Mexico, China and India, among others countries, however it is more likely that we will enter into licensing or joint venture arrangements with local partners who will be primarily responsible for the day-to-day operations. Any expansion outside of the US will require significant management attention and financial resources to successfully develop and operate any such facilities, including the sales, supply and support channels, and we cannot assure you that we will be successful or that our expenditures in this effort will not exceed the amount of any resulting revenues. Our international operations expose us to risks and challenges that we would otherwise not face if we conducted our business only in the United States, such as:

- increased cost of enforcing our intellectual property rights;
- heightened price sensitivities from customers in emerging markets;
- our ability to establish or contract for local manufacturing, support and service functions;
- localization of our LABs and components, including translation into foreign languages and the associated expenses;
- compliance with multiple, conflicting and changing governmental laws and regulations;
- foreign currency fluctuations;
- laws favoring local competitors;
- weaker legal protections of contract terms, enforcement on collection of receivables and intellectual property rights and mechanisms for enforcing those rights;
- market disruptions created by public health crises in regions outside the United States;
- difficulties in staffing and managing foreign operations, including challenges presented by relationships with workers' councils and labor unions;
- issues related to differences in cultures and practices; and
- changing regional economic, political and regulatory conditions.

***Government regulation and environmental, health and safety concerns may adversely affect our business.*** Our operations in the United States will be subject to the Federal, State and local environmental, health and safety laws applicable to the reclamation of lead acid batteries. Depending on how any particular operation is structured, our facilities will probably have to obtain environmental permits or approvals to operate, including those associated with air emissions, water discharges,

and waste management and storage. We may face opposition from local residents or public interest groups to the installation and operation of our facilities. Failure to secure (or significant delays in securing) the necessary approvals could prevent us from pursuing some of our planned operations and adversely affect our business, financial results and growth prospects. In addition to permitting requirements, our operations are subject to environmental health, safety and transportation laws and regulations that govern the management of and exposure to hazardous materials such as the lead and acids involved in battery reclamation. These include hazard communication and other occupational safety requirements for employees, which may mandate industrial hygiene monitoring of employees for potential exposure to lead. Failure to comply with these requirements could subject our business to significant penalties (civil or criminal) and other sanctions that could adversely affect our business.

The nature of our operations involve risks, including the potential for exposure to hazardous materials such as lead, that could result in personal injury and property damage claims from third parties, including employees and neighbors, which claims could result in significant costs or other environmental liability. Our operations also pose a risk of releases of hazardous substances, such as lead or acids, into the environment, which can result in liabilities for the removal or remediation of such hazardous substances from the properties at which they have been released, liabilities which can be imposed regardless of fault, and our business could be held liable for the entire cost of cleanup even if we were only partially responsible. Like any manufacturer, we are also subject to the possibility that we may receive notices of potential liability in connection with materials that were sent to third-party recycling, treatment, and/or disposal facilities under the Federal Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (“CERCLA”), and comparable state statutes, which impose liability for investigation and remediation of contamination without regard to fault or the legality of the conduct that contributed to the contamination, and for damages to natural resources. Liability under CERCLA is retroactive, and, under certain circumstances, liability for the entire cost of a cleanup can be imposed on any responsible party.

As our business expands outside of the United States, our operations will be subject to the environmental, health and safety laws of the countries where we do business, including permitting and compliance requirements that address the similar risks as do the laws in the United States, as well as international legal requirements such as those applicable to the transportation of hazardous materials. Depending on the country or region, these laws could be as stringent as those in the US, or they could be less stringent or not as strictly enforced. In some countries in which we are interested in expanding our business, such as Mexico and China, the relevant environmental regulatory and enforcement frameworks are in flux and subject to change. Compliance with these requirements will cause our business to incur costs, and failure to comply with these requirements could adversely affect our business.

In the event we are unable to present and operate our AquaRefining process and operations as safe and environmentally responsible, we may face opposition from local governments, residents or public interest groups to the installation and operation of our facilities.

***Control by management may limit your ability to influence the outcome of director elections and other transactions requiring stockholder approval.*** Prior to this offering, our directors and executive officers beneficially own approximately 49.9% of our outstanding common stock. Upon the completion of this offering, and assuming the conversion of all convertible notes at the initial conversion price of \$2.50 per share, our directors and executive officers will beneficially own approximately 26.6% of our outstanding common stock. As a result, in addition to their board seats and offices, such persons will have significant influence over corporate actions requiring stockholder approval, including the following actions:

- to elect or defeat the election of our directors;
- to amend or prevent amendment of our certificate of incorporation or bylaws;
- to effect or prevent a merger, sale of assets or other corporate transaction; and
- to control the outcome of any other matter submitted to our stockholders for vote.

Such persons’ stock ownership may discourage a potential acquirer from making a tender offer or otherwise attempting to obtain control of our company, which in turn could reduce our stock price or prevent our stockholders from realizing a premium over our stock price.

#### **Risks Related to this Offering and Owning Our Common Stock**

***Prior to the completion of our initial public offering, there was no public trading market for our common stock.*** The offering under this prospectus is an initial public offering of our common shares. Upon the completion of this offering, our

common stock will commence trading on the Nasdaq Capital Market, under the symbol “AQMS”. However, there can be no assurance that we will be able to successfully develop a liquid market for our common shares. The stock market in general, and early stage public companies in particular, has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of such companies. If we are unable to develop a market for our common shares, you may not be able to sell your common shares at prices you consider to be fair or at times that are convenient for you, or at all.

***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.*** 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” including, but not limited to:

- not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act;
- reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements;
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments; and
- extended transition periods available for complying with new or revised accounting standards.

We have chosen to “opt out” of the extended transition periods available for complying with new or revised accounting standards, but we intend to take advantage of all of the other benefits available under the JOBS Act, including the exemptions discussed above. 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.

We will remain an “emerging growth company” for up to five years, 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.

***Our status as an “emerging growth company” under the JOBS Act may make it more difficult to raise capital as and when we need it.*** Because of the exemptions from various reporting requirements provided to us as an “emerging growth company,” we may be less attractive to investors and it may be difficult for us to raise additional capital as and when we need it. Investors may be unable to compare our business with other companies in our industry if they believe that our reporting is not as transparent as other companies in our industry. If we are unable to raise additional capital as and when we need it, our financial condition and results of operations may be materially and adversely affected.

***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 develop our recycling centers and 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. Therefore, you should not expect to receive cash dividends on the common stock we are offering.

***We will incur significant increased costs as a result of becoming a public company that reports to the Securities and Exchange Commission and our management will be required to devote substantial time to meet compliance obligations.*** As a public company reporting to the Securities and Exchange Commission, we will incur significant legal, accounting and other expenses that we did not incur as a private company. We will be subject to reporting requirements of the Securities Exchange Act of 1934 and the Sarbanes-Oxley Act of 2002, as well as rules subsequently implemented by the Securities and Exchange 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 are expected to 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 will need to devote a substantial amount of time to these compliance initiatives. In addition, we expect these rules and regulations to 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.

***Assuming a market for our common stock develops, shares eligible for future sale may adversely affect the market for our common stock.*** We have agreed to register for resale 2,461,743 shares of common stock expected to be issued upon conversion of our convertible notes and 682,540 shares of common stock underlying warrants. Furthermore, commencing on the 90<sup>th</sup> day following the close of this offering, certain of our stockholders may be eligible to sell all or some of their shares of common stock by means of ordinary brokerage transactions in the open market pursuant to Rule 144, promulgated under the Securities Act, subject to certain limitations. In general, pursuant to Rule 144, non-affiliate stockholders may sell freely after six months subject only to the current public information requirement (which disappears after one year). Of the 12,825,384 shares of our common stock expected to be outstanding following completion of the offering, approximately 2,461,743 shares will be held by “non-affiliates” who received their common shares upon conversion of their convertible notes. Those 2,461,743 shares will be freely tradable without restriction pursuant to Rule 144 following the expiration of the 180-day lock-up previously agreed to by the convertible note holders.

Any substantial sale of our common stock pursuant to Rule 144 or pursuant to any resale prospectus (including sales by investors of securities acquired in connection with this offering) may have a material adverse effect on the market price of our common stock.

***You will experience immediate dilution in the book value per share of the common stock you purchase.*** Because the price per share of our common stock being offered is substantially higher than the book value per share of our common stock, you will experience substantial dilution in the net tangible book value of the common stock you purchase in this offering. Based on the offering price of \$5.00 per share, if you purchase shares of common stock in this offering, you will experience immediate and substantial dilution of \$2.62 per share in the net tangible book value of the common stock at March 31, 2015.

***Our charter documents and Delaware law may inhibit a takeover that stockholders consider favorable.*** Upon the closing of this offering, provisions of our Certificate of Incorporation (“Certificate”) and bylaws and applicable provisions of Delaware law may delay or discourage transactions involving an actual or potential change in control or change in our management, including transactions in which stockholders might otherwise receive a premium for their shares, or transactions that our stockholders might otherwise deem to be in their best interests. The provisions in our Certificate and bylaws:

- limit who may call stockholder meetings;
- do not permit stockholders to act by written consent;
- 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.

In addition, once we become a publicly traded corporation, Section 203 of the Delaware General Corporation Law may limit our ability to engage in any business combination with a person who beneficially owns 15% or more of our outstanding voting stock unless certain conditions are satisfied. This restriction lasts for a period of three 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.

***Our bylaws designate the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain litigation that may be initiated by our stockholders, which could limit our stockholders’ ability to obtain a favorable judicial forum for disputes with the Company.*** Our bylaws provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, (iii) any action asserting a claim against us or any our directors, officers or other employees arising pursuant to any provision of the Delaware General Corporation Law or our certificate of incorporation or bylaws, or (iv) any action asserting a claim against us or any our directors, officers or other employees governed by the internal affairs doctrine. This forum selection provision in our bylaws may limit our stockholders’ ability to obtain a favorable judicial forum for disputes with us or any our directors, officers or other employees.



## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the sections entitled “Prospectus Summary,” “Risk Factors,” “Use of Proceeds,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and “Business,” contains forward-looking statements. The words “believe,” “may,” “will,” “potentially,” “estimate,” “continue,” “anticipate,” “intend,” “could,” “would,” “project,” “plan,” “expect” and similar expressions that convey uncertainty of future events or outcomes are intended to identify forward-looking statements. These forward-looking statements include, but are not limited to, statements concerning the following:

- our future financial and operating results;
- our intentions, expectations and beliefs regarding anticipated growth, market penetration and trends in our business;
- the timing and success of our plan of commercialization;
- our ability to operate our AquaRefining process on a commercial scale;
- our ability to procure LABs in sufficient quantities at competitive prices;
- the adequacy of the net proceeds of this offering to complete the development of our initial recycling center;
- the effects of market conditions on our stock price and operating results;
- our ability to maintain our competitive technological advantages against competitors in our industry;
- our ability to have our technology solutions gain market acceptance;
- our ability to maintain, protect and enhance our intellectual property;
- the effects of increased competition in our market and our ability to compete effectively;
- our plans to use the proceeds from this offering;
- costs associated with defending intellectual property infringement and other claims;
- our expectations concerning our relationships with suppliers, partners and other third parties;
- the attraction and retention of qualified employees and key personnel;
- future acquisitions of or investments in complementary companies or technologies; and
- our ability to comply with evolving legal standards and regulations, particularly concerning requirements for being a public company and environmental regulations.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in “Risk Factors” and elsewhere in this prospectus. Moreover, we operate in a very competitive and rapidly changing environment, and new risks emerge from time to time. It is not possible for us to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this prospectus may not occur and actual results could differ materially and adversely from those anticipated or implied in our forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in our forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances described in the forward-looking statements will be achieved or occur. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this prospectus to conform these statements to actual results or to changes in our expectations, except as required by law.

You should read this prospectus and the documents that we reference in this prospectus and have filed with the Securities and Exchange Commission as exhibits to the registration statement of which this prospectus is a part with the understanding that our actual future results, levels of activity, performance and events and circumstances may be materially different from what we expect.

## INDUSTRY AND MARKET DATA

This prospectus contains statistical data, estimates, and forecasts that are based on independent industry, government and non-government organization publications or other publicly available information, as well as other information based on our internal sources. Although we believe that the third-party sources referred to in this prospectus are reliable, estimates as they relate to projections involve numerous assumptions, are subject to risks and uncertainties, and are subject to change based on various factors, including those discussed under the section titled “Risk Factors” and elsewhere in this prospectus. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

Certain information in the text of this prospectus is contained in independent industry government and non-governmental organizational publications. The sources of these publications are provided below:

- IC Consultants, Ltd., *Lead The Facts*;
- U.S. Department of the Interior, *Comparison of the U.S. Lead Recycling Industry in 1998 and 2011*;
- United Nations Environment Programme, *Overview of Lead Recycling*;
- Occupational Knowledge International and Fronteras Comunes, *Exporting Hazards*;
- CEC Secretariat of the Commission for Environmental Cooperation, *Hazardous Trade?*;
- *Lead Action 21 Evolution of an Element*, published by the International Lead Association;
- International Lead Association, *Lead Facts*, and
- The Blacksmith Institute, *Lead Smelting*.

## OUR BUSINESS

### Overview

We are engaged in the business of recycling lead through a novel, proprietary and patent-pending process that we developed and named “AquaRefining”. Lead is a globally traded commodity with a worldwide market value in excess of \$20 billion. Lead acid batteries, or LABs, are the primary use of all lead produced in the world. Because the chemical properties of lead allow it to be recycled and reused indefinitely, LABs are also the primary source of all lead production. As such, LABs are almost 100% recycled for purposes of capturing the lead contained therein for re-use. We believe that our proprietary AquaRefining process will provide for the recycling of LABs and the production of a pure grade lead with a significantly lower cost of production, and with fewer environmental and regulatory issues, than conventional methods of lead production.

In recent years, many lead mines have become exhausted and recycled lead has become increasingly important to LAB production. Recycled lead surpassed mined lead in the 1990s and now represents more than 50% of the lead content in new LABs. Whether it is produced from lead ore or recycled LABs, lead has historically been produced by smelting. Smelting is a high-temperature, endothermic chemical reduction, making it inefficient, energy intensive and often highly pollutive process. As a consequence of its environmental and health issues, lead smelting has become increasingly regulated in developed countries. In the US, regulatory non-compliance has forced the closure of large high-capacity lead smelters in Vernon, California, Frisco, Texas and Herculaneum, Missouri over the last three years. Herculaneum was the last remaining primary lead-mine operation (i.e., smelting lead from ore) in the US, though secondary lead smelters that process recycled lead continue to operate in the US. In response, there has been an expansion of LAB smelting capacity in Mexico and other less regulated countries. The resulting transportation of used LABs from where they originate in the US to smelters in Mexico, the Philippines and elsewhere is an increasingly significant logistical and global environmental cost.

AquaRefining uses an aqueous solvent and a novel electro-chemical process to produce pure lead (i.e., higher than 99.99% purity). We believe that AquaRefining can significantly reduce production costs as compared with alternative methods of producing pure lead. This cost reduction is partly because our novel electro-chemical process requires less energy than the endothermic high temperature (1400°F) chemical reduction that is at the core of smelting. It is also partly because our process does not generate toxic high temperature dust and gas, or the lead containing slag and dross that are unavoidable byproducts of smelting, and which require capital and energy intensive processes to meet environmental compliance. We also have the potential to locate multiple smaller recycling facilities in areas closer to the source of used LABs, thereby reducing transport costs and supply chain bottlenecks. AquaRefining is a water-based ambient temperature process. On this basis, we believe that it significantly reduces environmental emissions, health concerns and permitting needs as compared with lead smelting. We believe that the combined advantages offered by AquaRefining represent a potential step change in lead recycling technology, one that can deliver advantages in economics, footprint and logistics while greatly reducing the environmental impact of lead recycling.

The modular nature of AquaRefining makes it possible to start LAB recycling at a much smaller scale than is possible with smelters, thereby significantly reducing the investment risk associated with building a lead production facility. Our plan is to actively explore distributed recycling in the US by establishing our own initial recycling operation near Reno, Nevada. This plan is based on our belief that Reno has become a significant hub of the West Coast’s LAB distribution infrastructure and yet is very poorly served by the LAB recycling industry. From our initial recycling facility near Reno, we intend to expand first throughout the US and then overseas. We will seek to own our own recycling facilities but will also evaluate joint ventures, licensing and direct sales.

### Our Markets

#### The Lead Market

Lead is a globally traded commodity and is the essential component of over 95% of the world’s rechargeable batteries. Lead is traded as a commodity on the London Metals Exchange, or LME. The price of lead on the LME has risen from a trading range of \$1,000 to \$1,200 per metric ton during 2005 to \$2,000 to \$2,400 per metric ton during 2014, with a recent high price of \$2,139 per metric ton on May 5, 2015. The average spot price of lead on the LME over the period March 1, 2015 to May 31, 2015 was \$1,929 per metric ton. According to the International Lead Association, or ILA, world production of lead is approximately 10.5 million metric tons per year, while industry consultant, CHR Metals, Ltd., puts the official output of refined lead at approximately 11.5 million metric tons per year. This represents a worldwide market in excess of \$20 billion.



Figure 1: International Lead Association, 14<sup>th</sup> Asian Battery Conference, Hyderabad, India 2013

Lead is integral for LABs. LABs are the primary use of all lead produced in the world, and recycled LABs are the primary source of all lead production. According to the ILA, in 2012 the manufacture of LABs accounted for approximately 85% of all lead produced worldwide. In addition, the ILA reports that 57% of lead production worldwide was from recycled LABs. The integral and cyclical relationship between lead and LABs is the result of several important factors, including:

- the chemical properties of lead, which allow it to be recycled and reused indefinitely;
- legislation requiring the recycling of LABs;
- the Basel Convention on the Control Transboundary Movements of Hazardous Waste and Their Disposal which impacts the international trade in lead among its 170 signatory countries (the US is not a signatory);
- robust reverse supply chains in the US that cost effectively return used LABs to manufacturers and recyclers; and
- supply and demand economics that make recycled lead cost competitive with mined lead.

There are two principal sources of lead, namely ores and concentrates, which are smelted to produce “primary” lead, and used LABs, which are also smelted to produce what is known as “secondary” lead.

Primary lead is of high purity (i.e., greater than 99.99% purity) and is required for the active material in LABs. Secondary lead is typically 95% lead, the balance being other elements such as antimony, arsenic, bismuth, calcium, copper, selenium and tin. Some of these elements are added to create the structural lead alloys used in LAB manufacturing. Secondary lead can be further refined to the purity of primary lead. However, this requires an expensive multi-step process. LAB manufacturers have historically used primary and secondary lead in the manufacture of their LABs on a 50/50 basis. However, as LAB technology evolves, LAB manufacturers require higher percentage amounts of primary lead in their LAB manufacturing processes.

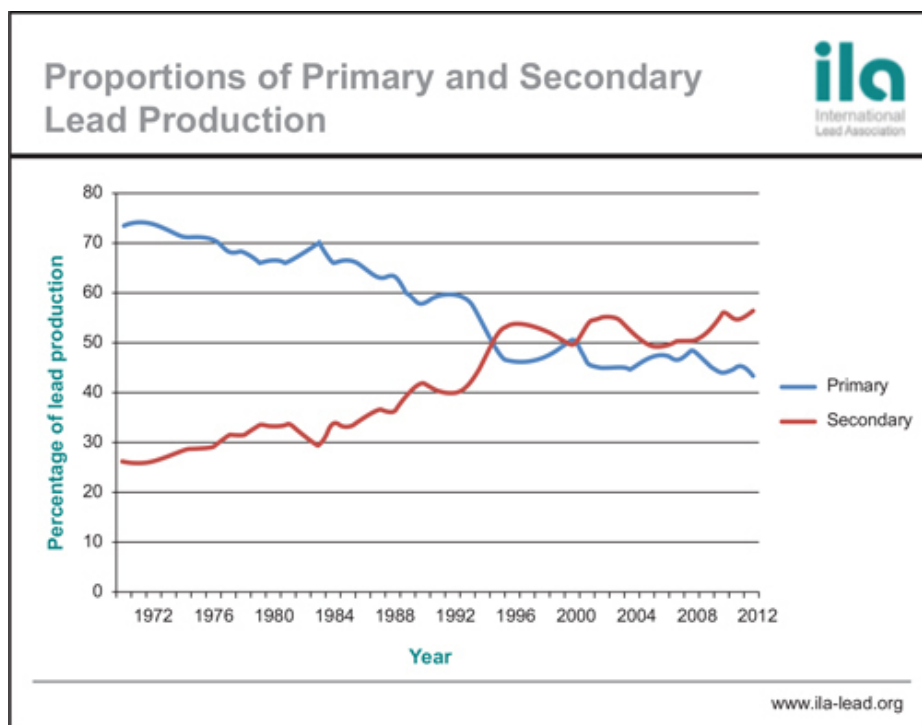


Figure 2: International Lead Association, 14<sup>th</sup> Asian Battery Conference, Hyderabad, India 2013

As noted above, lead is traded as a commodity on the LME. The average spot price of lead on the LME over the period March 1, 2015 to May 31, 2015 was \$1,929 per metric ton. Based on our discussions with buyers of lead in the US lead market, different grades of lead are traded in the US at a discount or premium to the LME price substantially as follows:

- Virgin pure lead (greater than 99.99% purity): +14 cents per pound premium (approximately 14%) to the LME price;
- Specific battery grade alloys: +1 to +9 cents per pound premium (approximately 1% to 9%) to the LME price; and
- Rough lead (unrefined 95% pure): -5 to -10 cents per pound discount (approximately -5% to -10%) to the LME price.

Demand for lead has made it the world’s most recycled material. According to the ILA and The International Lead Zinc Research Organization, or ILZRO, most of the easily mined sources of lead are worked out and new production is a byproduct of zinc mining. According to the ILA, the proportion of world lead output from recycled lead has risen from 25% in 1970 to over 55% in 2012. The reported proportion of lead production from recycling varies markedly from region to region. In 2013, the proportion of all lead production from recycling was 83% in North America and 76% in Europe. In some countries, including Pakistan and India, the proportion is even higher.

### Lead Smelting

Currently, smelters produce virtually all the world’s mined and recycled lead. Smelting is an inefficient, energy intensive and often highly polluting process. At its core, smelting is a high temperature (in excess of 1400°F) chemical reduction process in which lead compounds are heated and then reacted with reducing agents to remove the oxygen and sulfur, leaving behind lead. The chemical reactions are endothermic, which means that heat must be continually supplied to replace the energy consumed by the reduction processes. In smelting, 5% to 15% of the lead is lost as “slag” and the lead produced typically contains 2% or more of impurities. Importantly, smelting is only cost effective at large scale, typically more than 200 metric tons of lead per day.

In addition to the high costs and inefficiencies associated with smelting, it generates large volumes of toxic solid, liquid, particulate and gaseous waste. In developed countries, there is both increased environmental regulation and enforcement of such, including monitoring of permissible blood lead levels in employees and local populations. These regulations and the increasing enforcement have made it more expensive to operate smelters. According to a report titled “Hazardous Trade?”

produced by the Secretariat of the Commission for Environmental Cooperation in 2013, this has led to a decline of lead smelters in the U.S., an expansion of smelting operations in Mexico and a resultant increase in the export of used LABs from the US followed by the re-import of recycled lead. This trade is believed to be largely driven by the lower costs related to the less stringent environmental standards and enforcement in Mexico. For the foregoing reasons, we believe that lead smelting facilities are increasingly located in poorly regulated areas remote from both the source of used LABs and the demand for lead. We believe that the remote location of smelting can add up to \$250 per metric ton of transport costs to the production of recycled lead.

### Lead Acid Batteries

The lead acid battery was invented in 1859 and is the oldest and most popular type of rechargeable battery. LABs have the ability to provide higher surge currents than other rechargeable batteries, making them ideal for use in motor vehicles and other machines to provide the high current required by starter motors. LABs are also used in lithium-ion battery-powered electric vehicles to power most functions (outside of the drive train). The relatively inexpensive cost of manufacturing makes LABs attractive for other uses as well, including storage in backup power supplies in cell phone towers, grid storage applications and high-availability settings like hospitals, and stand-alone power systems.

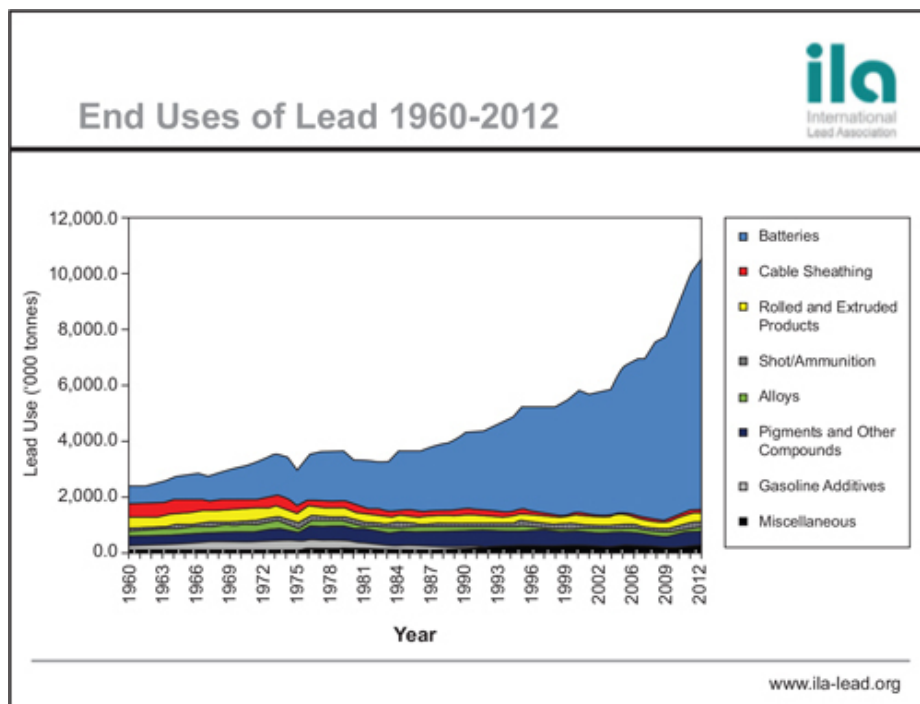


Figure 3: International Lead Association, 14<sup>th</sup> Asian Battery Conference, Hyderabad, India 2013

The majority of LAB production, and with it the majority of lead, goes into what are called “starter, lights, ignition” batteries for automotive vehicles. According to CHR Metals, total lead output in 2017 will be 20% higher than it was in 2012. Similarly, articles published in the Financial Times and the Wall Street Journal support continued growth in demand for lead for at least the next 20 years as car ownership increases rapidly in developing nations. The battery market for electric e-bikes and scooters in China is one example of a recent and rapidly growing niche application for LABs. This niche has grown from minimal roots in 2005 to accounting for over 15% of LAB production in 2012. There are now over 150 million e-bikes and scooters now on the road in China, and nearly all of them are powered by LABs. We believe that grid storage and other energy storage applications linked to renewable energy (solar and wind) will also generate increased demand for LABs, where low cost, safety and reliability will make them attractive options.

The increase in LAB manufacturing in general and particularly in China, India and Southeast Asia has increased demand for lead, putting pressure on global recycling networks to meet this demand. At present, we believe that most of the LAB recycling performed outside of the US, Canada, the EU, Japan, Korea, Taiwan, Australia and New Zealand is carried out in outdated facilities with poor environmental standards and insufficient enforcement. China, India, Pakistan and South America

appear to be moving toward tougher regulation and enforcement. We believe that this will drive a demand in foreign markets for more less polluting LAB recycling processes.

### **Our Business Model**

The market for lead is global in scale but local in nature and execution, with large differences in local regulation, custom and practice. In some regions it is highly regulated, and in others it is not. Consequently, we have developed our business model to commercialize our technology optimally across multiple countries.

In the US and similarly regulated countries, our plan is to build and operate our own LAB recycling facilities. These will be smaller distributed facilities rather than large centralized facilities as is required for smelting. Our plan is to locate our recycling facilities close to regional supplies of used LABs, starting with locations that are furthest from existing LAB smelting facilities. In countries where direct operation is not possible or not optimal, due to local laws that restrict or limit foreign ownership of operating businesses or otherwise, we plan to supply our process to approved third party customers on a fee-sharing basis.

Lead recycling is subject to a variety of domestic and international regulations related to hazardous materials, emissions, employee safety and other matters. While our operations will be subject to these regulations, we believe that one of our potential advantages will be our ability to conduct lead recycling operations with less regulatory cost and burden than smelting operators. One of our key objectives will be to educate regulators and the public as to the environmental benefits of AquaRefining. We believe we have the potential to develop a business model that offers both strong economics and the opportunity to conduct in a socially responsible manner an important recycling activity that to date has been conducted in an inefficient, energy intensive and often highly polluting manner.

### **AquaRefining Process**

We developed AquaRefining to be a less expensive, cleaner and modular alternative to smelting. Our process has two key elements, both of which are integral to our pending-patent application. The first is our use of a proprietary, non-toxic solvent that dissolves lead compounds. The second is a proprietary electro-chemical process and electrolyzer that converts the dissolved lead compounds into pure, primary grade lead on a fully automated basis.

Similar to conventional LAB recycling, our AquaRefining process begins with the crushing of used LABs and the separation of the metallic lead, active material (lead compounds), sulfuric acid and plastic for recycling. The active material is dissolved in our solvent. The primary lead is then stripped from the solvent using our patent pending and fully automated process allowing the solvent to be reused continuously and indefinitely. The photograph below is an actual full size AquaRefining unit installed in our Oakland development and test facility and is the basis for the modules we will produce in the module production facility we will build nearby.



Our AquaRefining process generates four outputs, namely:

- Primary (high purity) lead ingots;
- High quality LAB grade lead alloy ingots to specific customer specifications;
- Cleaned plastic chips, recovered from battery casings, which we intend to sell; and
- Sulfuric acid, which is recovered as part of our AquaRefining process, which we also intend to sell.

We expect to derive revenue primarily from the sale of primary and secondary lead recovered from the recycled LABs and tolling fees for converting used LABs into primary and secondary lead on behalf of our clients. We expect the additional revenue derived from the sale of cleaned plastic chips and sulphuric acid to be modest.

A significant benefit of our AquaRefining equipment is that we designed the equipment used in the process to be manufactured on a purpose-built production line, in standard sized modules. This is not possible with the smelting process, as smelters need to be constructed on site. This gives us the ability to provide AquaRefining systems with capacities ranging from four metric tons per day to 400 metric tons per day or more all based on our standard factory produced module. Following the completion of this offering, we plan to commence the production of our AquaRefining modules for our Reno facility and third parties.

### **Equipment**

We expect to obtain LAB crushing equipment and ingot production systems from Wirtz Manufacturing Co, Inc., a leading US-based supplier of equipment to LAB manufacturers and smelters. Wirtz has also expressed its interest in distributing our AquaRefining modules to those seeking LAB recycling systems; however, we have no definitive agreements with Wirtz with regard to its distribution of our AquaRefining modules. In August 2014, Wirtz purchased from us an unsecured convertible promissory note in the original principal amount of \$500,000, which it exchanged for one of our convertible notes in October 2014.

Other than the LAB crushing equipment and ingot production systems we expect to be supplied by Wirtz, we will source all other components of our AquaRefining modules and related equipment and products from off-the-shelf products or equipment that we will have designed and built to our specifications. All such equipment and products are available from multiple sources at competitive prices.

### **Our First Recycling Facility: Reno, Nevada**

We intend to develop our initial LAB recycling facility near Reno, Nevada. On May 29, 2015, we purchased 11.73 acres of undeveloped land for the purchase price of \$1,006,370. The property is located in the Tahoe Reno Industrial Center, a 107,000-acre park located nine miles east of Reno on I-80. The Tahoe Reno Industrial Center includes a developable 30,000-acre industrial complex, with pre-approved industrial and manufacturing uses and on-site rail service by both the Union Pacific and Burlington Northern Santa Fe railways. The Tahoe Reno Industrial Center is the home of the Tesla Gigafactory.

We intend to build a 125,000 square foot LAB recycling facility at our Reno property and have allocated a total of \$22.5 million of the proceeds of this offering towards the development of the facility, including \$13 million towards site construction and \$9.5 million towards the manufacture and installation of our AquaRefining modules, other equipment and fixtures. We have commenced the design of the facility and initiated the selection of a prime contractor to perform the work. We intend to commence construction of the facility within one month of the close of this offering. We expect to complete construction and commence commercial operations within ten months of the completion of this offering.

This facility will include a fully self-contained battery breaking and pre-treatment facility, which will be supplied, at our cost, by Wirtz Manufacturing Co., Inc. In keeping with our modular approach, we intend to commence LAB recycling operations shortly after the first AquaRefining module is delivered, following which, capacity will increase with each subsequent module delivery. We intend to install with the proceeds of this offering approximately eight AquaRefining modules of our own design and manufacture, and operate the facility at a production capacity of 40 metric tons of lead produced per day. Our near-term goal will be to increase our production at the Reno facility to 80 metric tons of lead per day. To do so, we will need an additional



eight AquaRefining modules and building improvements at a total cost of up to approximately \$9.5 million, depending on the timing of our receipt of the additional funds. If we are able to acquire additional funds early in the construction process, the incremental cost of building the 80 metric ton per day facility could be as little as approximately \$6 million. We intend to seek the additional funds through various financing sources, including the sale of our equity and debt securities and other means of debt financing, with a preference for debt financing. As of the date of this prospectus, we have commenced discussions with various providers of debt financing, including both government and commercial providers of debt financing. However, there can be no assurance that additional debt or equity financing will be available on commercially reasonable terms, if at all. The figure below is an artist's rendering of our proposed facility based on our present design specifications.



Pursuant to the real estate purchase and sale agreement by which we acquired the Reno property, we are responsible for the construction of all improvements and related costs, however the seller is responsible for the construction and related costs of all normal and customary off-site utility infrastructure typical of industrial/commercial parcels, including water supply, sewer capacity and electric power.

In connection with the development and operation of our Reno facility, we will be required to obtain, among other government permits and approvals, a use permit from the State of Nevada Division of Environmental Protection, Bureau of Waste Management and an air quality permit from the State of Nevada Division of Environmental Protection, Bureau of Air Pollution Control. Based on our meetings with officials from each of these agencies and our own permitting study, we do not expect to encounter any material issues or delays in obtaining all required permits and other governmental approvals for the construction and operation of our Reno facility.

We intend to establish additional recycling facilities throughout the US and overseas. However, we have no agreements or plans at this time concerning any recycling facilities other than our proposed Reno facility.

### **Supply of Used LABs**

We believe there is an ample supply of used LABs in the market today and will be for the foreseeable future. The used LAB market consists primarily of LAB manufacturers, LAB specialists and distributors and LAB recovery consolidators. We have entered into formal discussions with three separate suppliers of used LABs. Each of these suppliers has the ability to supply enough used LABs to operate our Reno facility at 80 metric tons of produced lead per day and have expressed a desire to do so. Although we have no definitive agreements in place as of the date of this prospectus with any LAB suppliers, based on our understanding of the market for used LABs and our discussions to date with LAB suppliers, we believe that used LABs should be readily available to us from a number of sources at competitive prices.

### **Competition**

As of the date of this prospectus, we are not aware of any commercially viable alternative to smelting for LAB recycling in operation, except for one variation on smelting that uses a thermal lance to provide the heat. This process, known as Isamelt, has some limited advantages over smelting but has not been widely taken up, although it has been in existence for over 20 years. In addition, several years ago, Engitec Technologies S.p.A. developed an electro-refining process as an alternative to smelting for lead ore. The process is known as the Flubor process and uses fluoboric acid as an electrolyte. We believe The Doe Run Company, a US-based operator of lead smelters, evaluated this process for the production of primary lead, however, to our knowledge, the Flubor process has never been used in commercial lead recycling by The Doe Run Company or anyone else.

We believe that our primary competition in the production of lead will come from operators of existing smelters and other parties invested in the existing supply chain for smelting, both of which may resist the change presented by AquaRefining. Competition from such incumbents may come in the form of price competition for lead produced, however to the extent we are successful in being a low cost producer of lead, we should be able to compete effectively based on price.

Another area where incumbents may seek to compete is in controlling access to used LABs. The market for used LABs is made up of the members of the LAB reverse supply chains, including auto repair shops, auto parts stores and auto dealers, LAB manufacturers who operate their own smelting operations and third parties who engage in the purchase and sale of used LABs. We believe that some LAB manufacturers who maintain their own smelting operations may feel significantly threatened by our AquaRefining process. Such parties may attempt to restrict our access to used LABs; however, we believe these LAB manufacturers only control approximately 50% of the market for used LABs, leaving us with significant access to LABs even if these parties do attempt to interfere. We have assumed at least some level of interference by incumbents and have initiated discussions with potential suppliers of used LABs. On the basis of these discussions, we do not view access to used LABs be a significant risk to our LAB recycling operations.

While we assume that smelters will be resistant, at least at first, to AquaRefining, we have received preliminary inquiries from a number of existing operators of lead smelters who are interested in augmenting their existing capacity or replacing it entirely with our AquaRefining modules. However, our business plan is not dependent or even focused on the acceptance of our process by lead smelters. We intend to initially focus on operating our AquaRefining facilities directly.

We do not expect to experience significant competition in connection with our sale of lead. We believe that the market for lead is established, fluid and effective; and like the markets for other natural resources, such as oil, gas, gold, silver, etc., we do not expect to encounter any issues, conditions or qualifications for the sale of our lead production at prevailing market prices set by the LME. The vertically integrated LAB manufacturers who conduct smelting operations also are buyers of lead from third parties. While these LAB manufacturers may feel threatened by our AquaRefining process, we believe that they will still purchase lead from us if we are able to offer it at the price we anticipate. Notwithstanding this, we believe that the vertically integrated LAB manufacturers account for only 50% of the demand for lead production, leaving a sizable amount of the lead market in the hands of purchasers who we believe will not be reluctant to purchase lead from us.

### **Intellectual Property Rights**

We regard the protection of our technologies and intellectual property rights as an important element of our business operations and crucial to our success. We rely primarily on a combination of patent laws, trade secrets, confidentiality procedures and contractual provisions to protect our proprietary technology. We generally require our employees, consultants and advisors to enter into confidentiality agreements. These agreements provide that all confidential information developed or made known to the individual during the course of the individual's relationship with us is to be kept confidential and not disclosed to third parties except under specific circumstances. In the case of our employees, the agreements provide that all of the technology that is conceived by the individual during the course of employment is our exclusive property. The development of our technology and many of our processes are dependent upon the knowledge, experience and skills of key scientific and technical personnel.

In November 2013, we filed with the US Patent and Trademark Office, or USPTO, a provisional patent covering multiple aspects of our AquaRefining process, including all aspects of our proprietary water-based solvent and our novel electrolyzer. In November 2014, our provisional patent application was converted into a non-provisional patent application which was filed in accordance with the Patent Cooperation Treaty and contained 35 claims. The claims seek patent protection for the entirety of the novel aspects of our process, starting with the dissolution of the lead compounds recovered from a used LAB, the solvents used and the range of chemical compositions under which they are effective. The claims also extend to novel aspects of the electrochemical apparatus and the range of electrochemical parameters, such as electrical current, voltage and solution pH. Finally, the claims seek patent protection for the type and composition of the electrodes used, the form and quality of the lead produced and methods of removing the lead from the electrodes.

In May 2015, we filed an additional non-provisional patent application with the USPTO in accordance with Patent Cooperation Treaty which contained 39 claims. These claims seek to provide additional, complementary and alternative aspects of the November 2014 filing.

In May 2015, we filed an additional six provisional patent applications with the USPTO containing a total of 54 claims. These provisional filings seek to extend our patent protection in our core process technology and seek patent coverage for areas including ancillary processes, electrolyte and water recovery, the form and uses of the lead produced and applications of our process to materials other than lead.

We intend to conduct foreign patent filings covering the claims in our provisional and non-provisional patent applications.

There can be no assurance that any patents will issue from any of our current or any future applications. Also, any patents that may issue may not survive a legal challenge to their scope, validity or enforceability, or provide significant protection for us. The failure of our patents, or the failure of trade secret laws, to adequately protect our technology, might make it easier for our competitors to copy our AquaRefining process.

We have also filed for trademark registration in the US of our corporate name “Aqua Metals” and the terms “AquaRefining,” “AquaRefinery” and “AquaRefine” and intend to conduct foreign filings of these marks.

### **Government Regulation**

Our operations in the United States will be subject to the federal, state and local environmental, health and safety laws applicable to the reclamation of LABs. While the lead reclamation process itself is generally not subject to Federal permitting requirements, depending on how any particular operation is structured, our facilities may have to obtain environmental permits or approvals from Federal, state or local regulators to operate, including permits or regulatory approvals related to air emissions, water discharges, waste management, and the storage of LABs on-site should that become necessary. We may face opposition from local residents or public interest groups to the installation and operation of our facilities. Failure to secure (or significant delays in securing) the necessary approvals could prevent us from pursuing some of our planned operations and adversely affect our business, financial results and growth prospects.

In addition to permitting requirements, our operations are subject to environmental health, safety and transportation laws and regulations that govern the management of and exposure to hazardous materials such as the lead and acids involved in LAB reclamation. These include hazard communication and other occupational safety requirements for employees, which may mandate industrial hygiene monitoring of employees for potential exposure to lead. Failure to comply with these requirements could subject our business to significant penalties (civil or criminal) and other sanctions that could adversely affect our business. Changes to these regulatory requirements in the future could also increase our costs, require changes in or cessation of certain activities, and adversely affect the business.

The nature of our operations involve risks, including the potential for exposure to hazardous materials such as lead, that could result in personal injury and property damage claims from third parties, including employees and neighbors, which claims could result in significant costs or other environmental liability. Our operations also pose a risk of releases of hazardous substances, such as lead or acids, into the environment, which can result in liabilities for the removal or remediation of such hazardous substances from the properties at which they have been released, liabilities which can be imposed regardless of fault, and our business could be held liable for the entire cost of cleanup even if we were only partially responsible. Like any manufacturer, we are also subject to the possibility that we may receive notices of potential liability in connection with materials that were sent to third-party recycling, treatment, and/or disposal facilities under the Federal Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (“CERCLA”), and comparable state statutes, which impose liability for investigation and remediation of contamination without regard to fault or the legality of the conduct that contributed to the contamination, and for damages to natural resources. Liability under CERCLA is retroactive, and, under certain circumstances, liability for the entire cost of a cleanup can be imposed on any responsible party.

As our business expands outside of the United States, our operations will be subject to the environmental, health and safety laws of the countries where we do business, including permitting and compliance requirements that address the similar risks as do the laws in the United States, as well as international legal requirements such as those applicable to the transportation of hazardous materials. Depending on the country or region, these laws could be as stringent as those in the US, or they could be less stringent or not as strictly enforced. In some countries in which we are interested in expanding our business, such as Mexico and China, the relevant environmental regulatory and enforcement frameworks are in flux and subject to change. Therefore, while compliance with these requirements will cause our business to incur costs, and failure to comply with these requirements could adversely affect our business, it is difficult to evaluate such potential costs or adverse impacts until such time as we decide to initiate operations in particular countries outside the United States.

**Employees**

As of the date of this prospectus, we employ 10 people on a full-time basis, including our four executive officers and six technical staff, one person on a part-time basis and three technical consultants. Upon the completion of this offering, we intend to hire up to 20 additional employees to support the production of our AquaRefining modules. We also expect to hire up to 50 additional employees in 2016 in connection with the operation of our LAB recycling facility in Reno, Nevada.

**Properties**

Our executive offices are presently located in a 2,300 square foot facility in Oakland, California pursuant to a six-month lease, ending July 31, 2015, at the rate of \$4,200 per month. We also lease a 5,200 square feet engineering and test facility in Oakland, California pursuant to a three-year lease at a lease rate of \$3,100 per month.

We are currently pursuing the lease of an approximately 20,000 square foot facility in the greater Oakland, California area from which we will assemble and ship AquaRefining modules. We also intend to consolidate our existing executive offices and engineering and test operations in the new facility. We believe there are several suitable lease sites available at competitive prices.

In May 2015, we purchased 11.73 acres of undeveloped land located in the Tahoe Reno Industrial Center, a 107,000-acre park located nine miles east of Reno, Nevada on I-80. We intend to develop a 125,000 square foot lab recycling facility on the property, as more fully described at “Our Business - Our First Recycling Facility: Reno, Nevada.”

**Litigation**

There are no pending legal proceedings to which we or our properties are subject.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

### General

We were formed as a Delaware corporation on June 20, 2014 for the purpose of engaging in the business of recycling lead through a novel, proprietary and patent-pending process that we developed and named "AquaRefining". Since our formation, we have focused our efforts on the further development of our AquaRefining process, establishment of strategic relationships and the pursuit of additional working capital. We have not commenced revenue-producing operations and, under our current plan of business, do not expect to do so until the second quarter of 2016 and subject to our receipt of a total of \$26 million of net proceeds from this offering.

To date, we have capitalized our operations with equity contributions and advances from our founders, our receipt of a \$500,000 investment from Wirtz Manufacturing Co. Inc. and our receipt of \$5.5 million of capital from our private placement sale of senior secured convertible promissory notes, which we refer to as our "convertible notes", in October 2014. Pursuant to the terms of our investment agreement with Wirtz Manufacturing Co. Inc., Wirtz exchanged its investment in our company for a convertible note sold in the October 2014 private placement. As a result we have issued and outstanding convertible notes in the aggregate principal amount of \$6 million, with accrued and unpaid interest as of March 31, 2015 in the amount of \$154,356.

Interest on our convertible notes accrues on the unpaid principal at the rate of six percent (6%) per year, except during any event of default under the convertible notes in which case the interest rate shall be twelve percent (12%) per year. All principal and interest under the convertible notes are due and payable on December 31, 2015. All principal and interest under the convertible notes are convertible into shares of common stock as follows:

- Upon the consummation of an initial public offering by us, all principal and interest shall automatically convert at 50% of the IPO price, provided, however, in no event shall the conversion price be greater than \$2.50 nor less than \$1.67 per share;
- In the event of a subsequent private placement approved by the holders of 50% or more of the aggregate principal amount of all convertible notes, all principal and interest shall automatically convert at 50% of the offer price in the subsequent private placement, provided, however, in no event shall the conversion price be greater than \$2.50 nor less than \$1.67 per share; and
- Until the 10<sup>th</sup> day prior to the consummation of an IPO by us, a holder of a convertible note, at its option, may convert at a conversion price of \$2.50 per share.

Pursuant to the terms of our convertible notes, all principal and accrued interest under the notes will automatically convert into shares of our common stock, at the conversion price of \$2.50 per share upon the completion of this offering.

### Plan of Operations

Our plan of operations for the 12-month period following the completion of this offering is to commence the development and construction of our initial recycling facility near Reno, Nevada. In May 2015, we purchased 11.73 acres of undeveloped land nine miles outside of Reno for the purchase price of \$1,006,370. We intend to build a 125,000 square foot LAB recycling facility at our Reno property and have allocated a total of \$22.5 million of the proceeds of this offering towards the development of the facility, including \$13 million towards site construction and \$9.5 million towards the manufacture and installation of our AquaRefining modules, other equipment and fixtures. We have commenced the design of the facility and initiated the selection of a prime contractor to perform the work. We intend to commence construction of the facility within 30 days of the close of this offering. We expect to complete construction and commence commercial operations within ten months of the completion of this offering.

We intend to install with the proceeds of this offering approximately eight AquaRefining modules of our own design and manufacture, and operate the facility at a production capacity of 40 metric tons of lead produced per day. However, in keeping with our modular approach, we intend to commence LAB recycling operations shortly after the first AquaRefining module is delivered, following which, capacity will increase with each subsequent module delivery. We believe that the net proceeds of this offering, together with our cash on hand, will be sufficient to complete the development of the Reno recycling facility, including the manufacture and installation of approximately eight AquaRefining recycling modules. This belief is based on our

current assumptions and estimates concerning the costs of production and manufacture and the availability of materials and labor. If our assumptions or estimates prove to be inaccurate, we may require additional funds in order to complete our Reno facility.

Our near-term goal will be to increase our production at the Reno facility to 80 metric tons of lead per day. To do so, we will need an additional eight AquaRefining modules and building improvements at a total cost of up to approximately \$9.5 million, depending on the timing of our receipt of the additional funds. If we are able to acquire additional funds early in the construction process, the incremental cost of building the 80 metric ton per day facility could be as little as approximately \$6 million. We intend to seek the additional funds through various financing sources, including the sale of our equity and debt securities and other means of debt financing, with a preference for debt financing. As of the date of this prospectus, we have commenced discussions with various providers of debt financing, including both government and commercial providers of debt financing. However, there can be no assurance that additional debt or equity financing will be available on commercially reasonable terms, if at all.

### **Results of Operations**

We were formed on June 20, 2014 and have not commenced revenue-producing operations. To date, our operations have consisted of the development and limited testing of our AquaRefining process and the development of our business plan. From inception on June 20, 2014 through December 31, 2014, we incurred \$231,043 of operations and development costs, consisting primarily of \$157,917 of salary and benefits, \$62,159 of supplies and overhead and \$10,967 for consulting fees. We also incurred \$1,175,613 of business development and management costs, consisting primarily of \$315,752 of salary and benefits, \$735,284 of professional services, \$45,922 of depreciation and amortization and \$78,655 of insurance, travel and overhead. Other expenses for the period June 20, 2014 through December 31, 2014 included \$216,919 of interest expense and \$1,172,627 resulting from a change in fair value of derivative liabilities relating to our convertible note financing and the related financing warrants. We incurred a net loss before tax of \$2,373,751 for the period from June 20, 2014 through December 31, 2014.

For the three months ended March 31, 2015, we incurred \$213,591 of operations and development costs, consisting primarily of \$122,219 of salary and benefits, \$26,368 of supplies and overhead and \$65,004 for consulting fees. We also incurred \$471,623 of business development and management costs, consisting primarily of \$306,921 of salary and benefits, \$79,840 of professional services, \$30,663 of depreciation and amortization and \$54,199 of insurance, travel and overhead. Other expenses for the three months ended March 31, 2015 included \$316,534 of interest expense and \$3,896,079 resulting from a change in fair value of derivative liabilities relating to our convertible note financing and the related financing warrants. We incurred a net loss before tax of \$4,898,651 for the three months ended March 31, 2015.

### **Financial Condition**

As of March 31, 2015, we had total assets of \$5,214,155 and a working capital deficit of \$1,735,764. We believe that we require a minimum of \$26 million of capital over the next 12 months in order to fund our current business plan, including the development of our initial recycling facility near Reno, Nevada. However, we may require additional capital over the next 12 months, the receipt of which there can be no assurance. In addition, we will require additional capital in order to fund our proposed development of additional AquaRefining recycling facilities. We intend to seek additional funds through various financing sources, including the private sale of our equity and debt securities, licensing fees for our technology, joint ventures with capital partners and project financing of our recycling facilities. In addition, we will consider alternatives to our current business plan that may enable us to achieve revenue producing operations and meaningful commercial success with a smaller amount of capital. However, there can be no guarantees that such funds will be available on commercially reasonable terms, if at all. If such financing is not available on satisfactory terms, we may be unable to further pursue our business plan and we may be unable to continue operations.

The report of our independent registered public accounting firm for the fiscal year ended December 31, 2014 states that due to our development stage status, lack of revenue and dependence upon future sources of equity or debt financing there is substantial doubt about our ability to continue as a going concern.

### **Off Balance Sheet Transactions**

We do not have any off-balance sheet transactions.

## Critical Accounting Policies

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. Please see Note 1 to our financial statements for a more complete description of our significant accounting policies.

*Convertible Instruments.* We account for hybrid contracts that feature conversion options in accordance with ASC 815 “Derivatives and Hedging Activities,” (“ASC 815”) and ASC 480 “Distinguishing Liabilities from Equity” (“ASC 480”), which require companies to bifurcate conversion options from their host instruments and account for them as free standing derivative financial instruments according to certain criteria. The criteria includes circumstances in which (i) the economic characteristics and risks of the embedded derivative instrument are not clearly and closely related to the economic characteristics and risks of the host contract, (ii) the hybrid instrument that embodies both the embedded derivative instrument and the host contract is not re-measured at fair value under otherwise applicable generally accepted accounting principles with changes in fair value reported in earnings as they occur and (iii) a separate instrument with the same terms as the embedded derivative instrument would be considered a derivative instrument. We account for convertible instruments that have been determined to be free standing derivative financial instruments (when we have determined that the embedded conversion options should be bifurcated from their host instruments) in accordance with ASC 815. Under ASC 815, a portion of the proceeds received upon the issuance of the hybrid contract is allocated to the fair value of the derivative. The derivative is subsequently marked to market at each reporting date based on current fair value, with the changes in fair value reported in results of operations.

Conversion options that contain variable settlement features such as provisions to adjust the conversion price upon subsequent issuances of equity or equity linked securities at exercise prices more favorable than that featured in the hybrid contract generally result in their bifurcation from the host instrument.

We account for convertible debt instruments, when we have determined that the embedded conversion options should not be bifurcated from their host instruments, in accordance with ASC 470-20 “Debt with Conversion and Other Options”. We record, when necessary, discounts to convertible notes for the intrinsic value of conversion options embedded in debt instruments based upon the differences between the fair value of the underlying common stock at the commitment date of the note transaction and the effective conversion price embedded in the note. Debt discounts under these arrangements are amortized under the effective interest method over the term of the related debt.

*Common Stock Purchase Warrants and Other Derivative Financial Instruments.* We classify as equity any contracts that (i) require physical settlement or net-share settlement or (ii) provides a choice of net-cash settlement or settlement in our own shares (physical settlement or net-share settlement) providing that such contracts are indexed to our own stock as defined in ASC 815-40 “Contracts in Entity’s Own Equity” (“ASC 815-40”). We classify as assets or liabilities any contracts that (i) require net-cash settlement (including a requirement to net cash settle the contract if an event occurs and if that event is outside our control) or (ii) give the counterparty a choice of net-cash settlement or settlement in shares (physical settlement or net-share settlement). We assess classification of common stock purchase warrants and other free standing derivatives at each reporting date to determine whether a change in classification between assets and liabilities or equity is required.

*Intangible and Other Long-Lived Assets.* Our intangible asset consists of a patent application contributed to us by five founding stockholders. The useful life of the asset has been determined to be ten years and the asset is being amortized. We periodically evaluate our intangible and other long-lived assets for indications that the carrying amount of an asset may not be recoverable. In reviewing for impairment, we compare the carrying value of such assets to the estimated undiscounted future cash flows expected from the use of the assets and their eventual disposition. When the estimated undiscounted future cash flows are less than their carrying amount, an impairment loss is recognized equal to the difference between the assets’ fair value and their carrying value. In addition to the recoverability assessment, we routinely review the remaining estimated lives of our long-lived assets. Any reduction in the useful life assumption will result in increased depreciation and amortization expense in the period when such determination is made, as well as in subsequent periods. We performed an impairment analysis on intellectual property for the quarter ended December 31, 2014 and concluded there was no impairment. We determined that the estimated life of the intellectual property properly reflected the current remaining economic life of the asset.

## MANAGEMENT

Set forth below are our directors and officers:

<b>Name</b>	<b>Age</b>	<b>Position</b>
Stephen R. Clarke	57	President, Chief Executive Officer and Chairman of the Board
Thomas Murphy	63	Chief Financial Officer and Director
Selwyn Mould	54	Chief Operating Officer
Stephen Cotton	48	Chief Commercial Officer
Stan Kimmel	79	Director
Vincent L. DiVito	55	Director
Mark Slade	54	Director

*Stephen R. Clarke* is a co-founder of our company and has served as our president, chief executive officer and chairman of our board directors since inception in June 2014. From May 2013 to June 2014, Dr. Clarke, along with Mr. Mould and others, engaged in research and development that ultimately lead to their development of the AquaRefining process. From 2008 to May 2013, Dr. Clarke was employed as the chief executive officer of Applied Intellectual Capital, Ltd., an Isle of Jersey company co-founded by Dr. Clarke in 1999 to engage in the business of incubating and developing electro-chemical technologies. Dr. Clarke holds a Ph.D. in computer simulation and manufacturing management from The University of Aston, UK, a BSc in mechanical engineering from Nottingham Trent University, UK and an MSc/MBA in engineering enterprise management from The University of Warwick, UK.

Dr. Clarke has extensive knowledge of the battery industry and electro-chemical technologies from his senior management position with Applied Intellectual Capital, Ltd. As a result of these and other professional experiences, our board of directors has concluded that Mr. Clarke is qualified to serve as a director.

*Thomas Murphy* is a co-founder of our company and has served as our chief financial officer and a member of our board directors since inception in June 2014. From May 2013 to June 2014, Mr. Murphy worked alongside Mr. Clarke and Mr. Mould in the development of the AquaRefining process and our current business. From September 2009 to May 2013, Mr. Murphy served as chief financial officer of Applied Intellectual Capital, Ltd. In addition Mr. Murphy has over 30 years' experience in senior financial positions working in publishing, construction and aviation industries.

Mr. Murphy has extensive knowledge of accounting issues and business operations in the markets in which we operate from his experience as chief financial officer of Applied Intellectual Capital, Ltd. As a result of these and other professional experiences, our board of directors has concluded that Mr. Murphy is qualified to serve as a director.

*Selwyn Mould* is a co-founder of our company and has served as our chief operating officer since inception in June 2014. From May 2013 to June 2014, Mr. Mould, along with Mr. Clarke and others, engaged in research and development that ultimately lead to their development of the AquaRefining process. From 2008 to May 2013, Mr. Mould served as chief operating officer of Applied Intellectual Capital, Ltd. From 1999 to 2007, Mr. Mould served as head of supply chain for Group Lotus Plc, the sports car manufacturer and engineering consultant. Prior to that he was head of logistics for Pilkington Plc. In his earlier career, Mr. Mould was a production manager for Chloride Industrial Batteries Ltd. Mr. Mould holds an MA in natural sciences from the University of Cambridge with a major in chemistry.

*Stephen Cotton* has served as our chief commercial officer since January 2015. Mr. Cotton co-founded Canara, Inc. in December 2001 and served as its chief executive officer through the sale of the company to a private equity firm in June 2012, after which he served as executive chairman until April 2014. Canara is a global provider of stationary battery systems with integrated monitoring systems and cloud-based monitoring services to many of the largest data center operators. From April 2014 to January 2015, Mr. Cotton managed his private investments.

*Stan Kimmel* has served as a member of our board of directors since May 2015. Mr. Kimmel has over 50 years of experience in the engineering and construction industry with a primary focus on design, construction and startup of first-of-a-kind processes, primarily in the fuels, energy, and chemical industries. From 1965 to 1998, Mr. Kimmel was employed by Fluor Corporation, an international engineering and construction company. From 1988 to 1998, Mr. Kimmel served as vice president of technology where he was responsible for a wide-range of technical and business development activities. Mr. Kimmel's responsibilities as vice president of technology included environmental engineering and identification and first-time engineering of commercially promising new technologies with a focus on advanced power and energy systems. Since 1998, Mr. Kimmel has been engaged



as an independent consultant on technical, business planning and management matters for the fuels, energy, and chemical industries.

Mr. Kimmel has extensive knowledge of the design, engineering and construction of first-of-a-kind processes, primarily in the fuels, energy, and chemical industries, from his senior management position with Fluor Corporation. As a result of these and other professional experiences, our board of directors has concluded that Mr. Kimmel is qualified to serve as a director.

*Vincent L. DiVito* has served as a member of our board of directors since May 2015. Since April 2010, Mr. DiVito has served as the owner and chief executive officer of Vincent L. DiVito, Inc., a financial and management consulting firm. From January 2008 to April 2010, Mr. DiVito served as president of Lonza America, Inc., a global life sciences chemical business headquartered in Allendale, New Jersey, and also served as chief financial officer and treasurer of Lonza America, Inc. from September 2000 to April 2010. Lonza America, Inc. is part of Lonza Group, whose stock is traded on the Swiss Stock Exchange. From 1990 to September 2000, Mr. DiVito was employed by Algroup Wheaton, a global pharmaceutical and cosmetics packaging company, first as its director of business development and later as its vice president and chief financial officer. Mr. DiVito is a certified public accountant and certified management accountant and is a National Association of Corporate Directors Board Leadership Fellow. He has served on the board of directors and chairman of the audit committee of Entertainment Gaming Asia Inc., a Nasdaq listed company gaming company, since October 2005 and also served as a member of the board of directors of Riviera Holdings Corporation, formerly an AMEX listed gaming and resort company, from July 2002 until the consummation of a change in control of the corporation in March 2011.

Mr. DiVito has extensive knowledge of accounting and corporate governance issues from his experience serving on various corporate boards of directors and has extensive operational knowledge as a result of his experience as a senior executive officer of major corporations. As a result of these and other professional experiences, our board of directors has concluded that Mr. DiVito is qualified to serve as a director.

*Mark Slade* has served as a member of our board of directors since June 2015. Mr. Slade was the chief executive officer and founder of Marex Financial Ltd, one of Europe's leading independent commodity brokers, from January 2006 to January 2011. Marex was a member of the London Metal Exchange, Intercontinental Exchange, The London International Financial Futures and Options Exchange and Eurex Exchange, with offices in London, Geneva and New York. Since leaving Marex Financial, Mr. Slade has held a number of advisory and executive roles. From December 2011 to December 2012, he was an advisor on international business development to the Hong Kong Mercantile Exchange. From January 2013 to July 2013, Mr. Slade was chief executive officer of London Capital Group. Since January 2015, Mr. Slade has served as an advisor on strategy and business development to Tower Trading Group Ltd. In addition to his corporate roles, Mr. Slade also held a number of board and committee appointments within the commodity futures industry, including being a board member of the London Metal Exchange (1999 – 2006) and the Futures and Options Association (2005-2008).

Mr. Slade has extensive knowledge of the metals and other commodity markets from his experience serving as a senior executive officer and consultant to commodity trading and brokerage firms. As a result of these and other professional experiences, our board of directors has concluded that Mr. Slade is qualified to serve as a director.

## **Board Composition**

Our board of directors may establish the authorized number of directors from time to time by resolution. Our board of directors currently consists of four authorized members.

Generally, under the listing requirements and rules of the Nasdaq Stock Market, independent directors must comprise a majority of a listed company's board of directors within one year of the completion of this offering. Our board of directors has undertaken a review of its composition, the composition of its committees and the independence of each director. Our board of directors has determined that, other than Mr. Clarke and Mr. Murphy, by virtue of their executive officer positions, none of our directors has a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each is "independent" as that term is defined under the applicable rules and regulations of the SEC and the listing requirements and rules of the Nasdaq Stock Market. In making this determination, our board of directors considered the current and prior relationships that each nonemployee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each nonemployee director. Accordingly, a majority of our directors are independent, as required under applicable Nasdaq Stock Market rules.

## **Committees of the Board of Directors**

Our board of directors has established an audit committee, a compensation committee, and a nominating and corporate governance committee. Our board of directors may establish other committees to facilitate the management of our business. The composition and functions of each committee are described below. Members serve on these committees until their resignation or until otherwise determined by our board of directors.

### **Audit Committee**

Our audit committee consists of Vincent DiVito, Stan Kimmel and Mark Slade, with Mr. DiVito serving as Chairperson. The composition of our audit committee meets the requirements for independence under current Nasdaq Stock Market listing standards and SEC rules and regulations. Each member of our audit committee meets the financial literacy requirements of the Nasdaq Stock Market listing standards. Mr. DiVito is an audit committee financial expert within the meaning of Item 407(d) of Regulation S-K under the Securities Act of 1933, as amended, or the Securities Act. Our audit committee will, among other things:

- select a qualified firm to serve as the independent registered public accounting firm to audit our financial statements;
- discuss the scope and results of the audit with the independent registered public accounting firm, and review, with management and the independent registered public accounting firm, our interim and year-end operating results;
- develop procedures for employees to submit concerns anonymously about questionable accounting or audit matters;
- review our policies on risk assessment and risk management;
- review related-party transactions; and
- approve (or, as permitted, pre-approve) all audit and all permissible nonaudit services, other than de minimis nonaudit services, to be performed by the independent registered public accounting firm.

Our audit committee operates under a written charter that satisfies the applicable rules of the SEC and the listing standards of the Nasdaq Stock Market.

### **Compensation Committee**

Our compensation committee consists of Mark Slade, Stan Kimmel and Vincent DiVito, with Mr. Slade serving as Chairperson. The composition of our compensation committee meets the requirements for independence under the Nasdaq Stock Market listing standards and SEC rules and regulations. Each member of the compensation committee is also a nonemployee director, as defined pursuant to Rule 16b-3 promulgated under the Exchange Act, and an outside director, as defined pursuant to Section 162(m) of the Internal Revenue Code of 1986, as amended, or the Code. The purpose of our compensation committee is to discharge the responsibilities of our board of directors relating to compensation of our executive officers. Our compensation committee will, among other things:

- review, approve and determine the compensation of our executive officers;
- administer our stock and equity incentive plans;
- make recommendations to our board of directors regarding the establishment and terms of incentive compensation and equity plans; and
- establish and review general policies relating to compensation and benefits of our employees.

Our compensation committee operates under a written charter that satisfies the applicable rules of the SEC and the listing standards of the Nasdaq Stock Market.

### **Nominating and Corporate Governance Committee**

Our nominating and corporate governance committee consists of Stan Kimmel, Vincent DiVito and Mark Slade, with Mr. Kimmel serving as Chairperson. The composition of our nominating and corporate governance committee meets the

requirements for independence under Nasdaq Stock Market listing standards and SEC rules and regulations. Our nominating and corporate governance committee will, among other things:

- identify, evaluate and make recommendations to our board of directors regarding nominees for election to our board of directors and its committees;
- evaluate the performance of our board of directors and of individual directors;
- consider and make recommendations to our board of directors regarding the composition of our board of directors and its committees;
- review developments in corporate governance practices;
- evaluate the adequacy of our corporate governance practices and reporting; and
- develop and make recommendations to our board of directors regarding corporate governance guidelines and matters.

The nominating and corporate governance committee operates under a written charter that satisfies the applicable listing requirements and rules of the Nasdaq Stock Market.

#### **Compensation Committee Interlocks and Insider Participation**

None of our independent directors, Stan Kimmel, Vincent L. DiVito or Mark Slade, is currently or has been at any time one of our officers or employees. None of our executive officers currently serves, or has served during the last year, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving as a member of our board of directors.

#### **Executive Compensation**

##### **Summary Compensation Table**

The following table sets forth the compensation awarded to, earned by or paid to, our executive officers for the year ended December 31, 2014. In reviewing the table, please note that:

- We commenced operations in June 2014 and commenced paying compensation to our executive officers in August 2014; and
- Mr. Cotton commenced his employment with us in January 2015.

<b>Name and Principal Position</b>	<b>Year</b>	<b>Salary</b>	<b>Bonus</b>	<b>Stock Awards</b>	<b>Option Awards</b>	<b>All Other Compensation</b>	<b>Total</b>
Stephen Clarke, CEO	2014	\$ 131,167	—	—	—	—	\$ 131,167
Selwyn Mould, COO	2014	\$ 119,167	—	—	—	—	\$ 119,167
Thomas Murphy, CFO	2014	\$ 106,667	—	—	—	—	\$ 106,667
Stephen Cotton, CCO	2014	—	—	—	—	—	—

##### **Narrative Disclosure to Summary Compensation Table**

We have entered into executive employment agreements with each of our executive officers. Pursuant to the employment agreements, we compensate our executive officers at the annual rate of \$280,000 for Dr. Clarke and \$250,000 for Messrs. Mould, Murphy and Cotton. The employment agreements entitle each officer to reasonable and customary health insurance and other benefits, at our expense, and a severance payment in the amount of two-times their then annual salary and related benefits in the event of our termination of their employment without cause or their resignation for good reason. Each employment agreement provides for intellectual property assignment and confidentiality provisions that are customary in our industry.

In April 2015, we granted Mr. Cotton options to purchase 286,364 shares of our common stock over a five-year period at an exercise price of \$3.56 per share. Mr. Cotton's options vest and first become exercisable over a three-year period commencing on the first anniversary of the date of grant. Mr. Cotton's options were granted pursuant to our 2014 Stock Incentive Plan. As of the date of this prospectus, we have not granted any other equity awards to our executive officers.

### **Compensation of Directors**

We do not compensate any of our executive directors for their service as a director and we have not adopted any policies or plans with regard to the compensation of our independent directors. However, in connection with the appointment of our current independent directors, we agreed to compensate each of the independent directors as follows:

- We have granted Vincent DiVito options to purchase 21,853 shares of our common stock over a five-year period at an exercise price of \$3.56 per share and agreed to pay him annually cash in the amount of \$60,000; and
- We have granted Stan Kimmel and Mark Slade options to purchase 17,482 shares of our common stock over a five-year period at an exercise price of \$3.56 per share and agreed to pay each annually cash in the amount of \$50,000.

The directors' options were granted pursuant to our 2014 Stock Incentive Plan. The options vest and first become exercisable over a three-year period commencing one year from the date of grant. The above-described cash payments are in lieu of attendance fees, however we intend to reimburse our independent directors for their reasonable expenses incurred in connection with attending meetings of our board of directors.

### **Related Party Transactions**

In November 2014, we purchased \$18,750 in shop tools and \$8,195 in shop supplies from AIC Labs, Inc., a wholly-owned subsidiary of AIC Nevada, Inc., a holder of more than 5% of our issued common shares.

Except as set forth above, we have not entered into any transactions with any of our directors, officers, beneficial owners of five percent or more of our common shares, any immediate family members of the foregoing or entities of which any of the foregoing are also officers or directors or in which they have a material financial interest, other than the compensatory arrangements described elsewhere in this prospectus.

We have adopted a policy that any transactions with directors, officers, beneficial owners of five percent or more of our common shares, any immediate family members of the foregoing or entities of which any of the foregoing are also officers or directors or in which they have a financial interest, will only be on terms consistent with industry standards and approved by a majority of the disinterested directors of our board.

### **Limitation of Liability of Directors and Indemnification of Directors and Officers**

The Delaware General Corporation Law provides that corporations may include a provision in their certificate of incorporation relieving directors of monetary liability for breach of their fiduciary duty as directors, provided that such provision shall not eliminate or limit the liability of a director (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) for unlawful payment of a dividend or unlawful stock purchase or redemption, or (iv) for any transaction from which the director derived an improper personal benefit. Our certificate of incorporation provides that directors are not liable to us or our stockholders for monetary damages for breach of their fiduciary duty as directors to the fullest extent permitted by Delaware law. In addition to the foregoing, our bylaws provide that we may indemnify directors, officers, employees or agents to the fullest extent permitted by law and we have agreed to provide such indemnification to each of our directors.

The above provisions in our certificate of incorporation and bylaws and in the written indemnity agreements may have the effect of reducing the likelihood of derivative litigation against directors and may discourage or deter stockholders or management from bringing a lawsuit against directors for breach of their fiduciary duty, even though such an action, if successful, might otherwise have benefited us and our stockholders. However, we believe that the foregoing provisions are necessary to attract and retain qualified persons as directors.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to our directors, officers and controlling persons pursuant to the foregoing provisions, or otherwise, we have been advised that in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

## PRINCIPAL STOCKHOLDERS

The following table sets forth certain information regarding the beneficial ownership of our common stock as of the date of this prospectus by:

- each person who is known by us to be the beneficial owner of more than five percent (5%) of our issued and outstanding shares of common stock;
- each of our directors and executive officers; and
- all directors and executive officers as a group.

The beneficial ownership of each person was calculated based on 6,825,384 common shares issued and outstanding prior to the offering, including 4,363,641 shares issued and outstanding as of the date of this prospectus and 2,461,743 shares issuable upon the conversion of our outstanding convertible notes as of March 31, 2015. The SEC has defined “beneficial ownership” to mean more than ownership in the usual sense. For example, a person has beneficial ownership of a share not only if he owns it, but also if he has the power (solely or shared) to vote, sell or otherwise dispose of the share. Beneficial ownership also includes the number of shares that a person has the right to acquire within 60 days of the date of this prospectus, pursuant to the exercise of options or warrants or the conversion of notes, debentures or other indebtedness. Two or more persons might count as beneficial owners of the same share. Unless otherwise indicated, the address for each reporting person is 501 23<sup>rd</sup> Avenue, Oakland, California 94606.

Name of Director or Executive Officer	Number of Shares	Percentage Owned Prior to Offering <sup>(1)</sup>	Percentage Owned After Offering <sup>(2)</sup>
Stephen R. Clarke	1,736,196 <sup>(3)</sup>	25.4%	13.5%
Selwyn Mould	785,455	11.5%	6.1%
Thomas Murphy	785,455	11.5%	6.1%
Stephen Cotton	100,121 <sup>(4)</sup>	1.5%	*
Stan Kimmel	— <sup>(5)</sup>	—%	—%
Vincent L. DiVito	— <sup>(6)</sup>	—%	—%
Mark Slade	— <sup>(5)</sup>	—%	—%
Directors and executive officers as a group	3,407,227	49.9%	26.6%

\* Less than 1%.

Name and Address of 5% + Holders	Number of Shares	Percentage Owned Prior to Offering <sup>(1)</sup>	Percentage Owned After Offering <sup>(2)</sup>
AIC Nevada, Inc.	732,559	10.7%	5.7%
Michael King	436,364	6.4%	3.4%
Liquid Patent Consulting, LLC 4551 Glencoe Avenue, Suite 150 Marina Del Rey, CA 90292	392,728 <sup>(7)</sup>	5.4%	2.9%

1 Assumes the issuance of 2,461,743 shares of our common stock issuable upon the conversion of our convertible notes.

2 Assumes the sale of 6,000,000 shares of our common stock in the present offering.

3 Includes 732,559 common shares held by AIC Nevada, Inc. Mr. Clarke is a director of AIC Nevada, Inc. and, therefore, is considered to be the beneficial owner of those shares.

4 Excludes 286,364 shares underlying an outstanding option subject to vesting.

5 Excludes 17,482 shares underlying an outstanding option subject to vesting.

6 Excludes 21,853 shares underlying an outstanding option subject to vesting.

7 Represents shares issuable upon exercise of an outstanding warrant.

## ESTIMATED USE OF PROCEEDS

After the payment of underwriting discounts of 8% on the sale of the shares offered hereby and estimated offering expenses of \$600,000, the net proceeds of this offering will be approximately \$27,000,000. We intend to apply the estimated net proceeds of the offering as follows:

	<u>Amount</u>	<u>Percent</u>
Build and equip a recycling facility near Reno, Nevada	\$ 22,500,000	83%
Tenant improvements and equipment for office and manufacturing facility in Alameda, California	\$ 500,000	2%
Patent and trademark filings	\$ 200,000	1%
Working Capital	\$ 3,800,000	14%
Total Net Proceeds	<u>\$ 27,000,000</u>	<u>100%</u>

We intend to build a 125,000 square foot LAB recycling facility at our Reno property and have allocated a total of \$22.5 million of the proceeds of this offering towards the development of the facility, including \$13 million towards site construction and \$9.5 million towards the manufacture and installation of our AquaRefining modules, other equipment and fixtures.

We believe that the net proceeds of this offering, together with our cash on hand, will be sufficient to complete the development of the Reno recycling facility, described in the section at “Our Business - Our First Recycling Facility, Reno Nevada”, including the manufacture and installation of approximately eight AquaRefining recycling modules with a capacity, as a group, to produce approximately 40 metric tons of lead per day. This belief is based on our current assumptions and estimates concerning the costs of production and manufacture and the availability of materials and labor. If our assumptions or estimates prove to be inaccurate, we may require additional funds in order to complete our Reno facility. In addition, the expected allocation of net proceeds set forth above represents our best estimates based upon our present plans and our assumptions regarding industry conditions and our anticipated future revenues and expenditures. We may find it necessary to reallocate some of the proceeds within the above-described categories or to use portions thereof for other purposes in order to carry out our business plan if those assumptions change.

If the underwriters exercise their right to purchase an additional 900,000 shares of common stock to cover over-allotments, we may receive up to an additional \$4.14 million, after deducting \$360,000 for underwriting discounts. We intend to apply any net proceeds from the exercise of the over-allotment option to working capital. Pending the uses described above, we intend to invest the net proceeds from this offering in short-term, investment-grade interest-bearing securities such as money market accounts, certificates of deposit, commercial paper, and guaranteed obligations of the U.S. government.

## CAPITALIZATION

The following table sets forth our capitalization as of March 31, 2015 on:

- an actual basis;
- a pro forma basis, giving effect to the automatic conversion of \$6.0 million principal amount, net, of our convertible notes, and \$154,356 of accrued interest thereon as of March 31, 2015, into 2,461,743 shares of common stock and the resulting elimination of the derivative liability related to the debt, each to be effective immediately upon the consummation of this offering as if such conversions had occurred on March 31, 2015; and
- a pro forma as adjusted basis to reflect, in addition, our sale of 6,000,000 shares of common stock in this offering at the initial public offering price of \$5.00 per share, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

You should read the information in this table together with our consolidated financial statements and related notes and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” appearing elsewhere in this prospectus.

	As of March 31, 2015		
	Actual	Pro Forma <sup>(1)</sup>	Pro Forma As Adjusted
Convertible notes <sup>(2)</sup>	\$ 5,317,942	\$ —	\$ —
Derivative liabilities	5,280,861	511,343	—
Stockholders’ (deficit) equity:			
Common stock, \$0.001 par value, 50,000,000 shares authorized, 4,363,641 shares issued and outstanding, actual; 6,825,384 shares issued and outstanding, pro forma; 12,825,384 shares issued and outstanding, pro forma as adjusted	4,364	6,826	12,826
Additional paid-in capital	1,598,531	12,519,943	39,513,943
Accumulated earnings (deficit)	(7,272,402)	(7,954,459)	(7,954,459)
<b>Total stockholders’ (deficit) equity</b>	<b>(5,669,507)</b>	<b>4,572,309</b>	<b>31,572,308</b>
<b>Total capitalization</b>	<b>\$ 4,929,296</b>	<b>5,083,652</b>	<b>31,572,308</b>

(1) The pro forma column reflects (i) the automatic conversion of \$6.0 million principal amount, net, of our convertible notes, and \$154,356 of accrued interest thereon as of March 31, 2015, into an aggregate of 2,461,743 shares of common stock and reclassified to common stock and additional paid in capital, and (ii) the reclassification of \$4,769,517 of derivative liability related to the convertible notes to additional paid in capital.

(2) Convertible notes is shown net of a debt discount of \$682,057 attributed to financing costs associated with our convertible notes. These notes will be converted into shares of common stock immediately upon the consummation of this offering and therefore have been excluded from the pro forma and pro forma as adjusted convertible notes balances.

The number of shares of our common stock to be outstanding after this offering is based on 6,825,384 shares of our common stock outstanding as of March 31, 2015 (including 4,363,641 shares of common stock outstanding as of the date of this prospectus and 2,461,743 shares common stock issuable upon conversion of our convertible notes as of March 31, 2015), and excludes:

- 584,547 shares of our common stock issuable upon exercise of outstanding options granted pursuant to our 2014 Stock Incentive Plan;
- 682,540 shares of our common stock issuable upon exercise of outstanding warrants;
- up to 900,000 shares issuable pursuant to the underwriters’ over-allotment option;
- 779,090 shares of our common stock reserved for future grants pursuant to our 2014 Stock Incentive Plan; and
- the shares of our common stock issuable upon exercise of the underwriters’ warrant.

## DILUTION

If you invest in our common stock, your interest will be diluted to the extent of the difference between the amount per share paid by purchasers of shares of common stock in this offering and the pro forma as adjusted net tangible book value per share of common stock immediately after the completion of this offering.

As of March 31, 2015, our pro forma net tangible book value was approximately \$3.6 million, or \$0.52 per share of common stock. Our pro forma net tangible book value per share represents the amount of our total tangible assets reduced by the amount of our total liabilities and divided by the total number of shares of our common stock outstanding as of March 31, 2015, assuming the conversion of \$6,154,356 of indebtedness relating to our convertible notes and related interest into 2,461,743 shares of common stock and the resulting elimination of the derivative liability related to the debt and write-off of unamortized debt issuance cost, each effective upon the completion of this offering.

After giving effect to our sale in this offering of 6,000,000 shares of our common stock, at the initial public offering price of \$5.00 per share, after deducting underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of March 31, 2015 would have been approximately \$30.6 million, or \$2.38 per share of our common stock. This represents an immediate increase in pro forma as adjusted net tangible book value of \$1.86 per share to our existing stockholders and an immediate dilution of \$2.62 per share to investors purchasing shares in this offering.

The following table illustrates this dilution:

Initial public offering price per share	\$	5.00
Pro forma net tangible book value per share as of March 31, 2015, before giving effect to this offering	\$	0.52
Increase in pro forma net tangible book value per share attributable to new investors purchasing shares in this offering		1.86
Pro forma as adjusted net tangible book value per share, after giving effect to this offering	\$	2.38
Dilution per share to new investors purchasing shares in this offering	\$	2.62

If the underwriters exercise their over-allotment option in full, the pro forma as adjusted net tangible book value per share of our common stock would be \$2.53 per share, and the dilution per share to new investors purchasing shares in this offering would be \$2.47 per share.

The following table summarizes, on a pro forma as adjusted basis as of March 31, 2015 after giving effect to (i) the automatic conversion of \$6.0 million principal amount, net, of indebtedness related to our convertible notes into shares of common stock and (ii) completion of this offering at the initial public offering price of \$5.00 per share, the difference between existing stockholders and new investors with respect to the number of shares of common stock purchased from us, the total consideration paid to us and the average price per share paid, before deducting underwriting discounts and commissions and estimated offering expenses:

	Shares Purchased		Total Consideration		Average Price Per Share
	Number	Percent	Amount	Percent	
Existing stockholders	6,825,384	53.2%	\$ 7,757,251	20.5%	\$ 1.14
New public investors	6,000,000	46.8	30,000,000	79.5	\$ 5.00
Total	12,825,384	100.0%	\$ 37,757,251	100.0%	

To the extent that our outstanding warrants are exercised, investors will experience further dilution.

Except as otherwise indicated, the above discussion and tables assume no exercise of the underwriters' over-allotment option. If the underwriters exercise their over-allotment option in full, our existing stockholders would own 49.7% and our new investors would own 50.3% of the total number of shares of our common stock outstanding upon the completion of this offering.



The number of shares of our common stock to be outstanding after this offering is based on 6,825,384 shares of our common stock outstanding as of March 31, 2015 (including 4,363,641 shares of common stock outstanding as of the date of this prospectus and 2,461,743 shares common stock issuable upon conversion of our convertible notes as of March 31, 2015), and excludes:

- 584,547 shares of our common stock issuable upon exercise of outstanding options granted pursuant to our 2014 Stock Incentive Plan;
- 682,540 shares of our common stock issuable upon exercise of outstanding warrants;
- up to 900,000 shares issuable pursuant to the underwriters' over-allotment option;
- 779,090 shares of our common stock reserved for future grants pursuant to our 2014 Stock Incentive Plan; and
- the shares of our common stock issuable upon exercise of the underwriters' warrant.

## DESCRIPTION OF SECURITIES

### Common Stock

We are authorized to issue 50,000,000 shares of \$0.001 par value common stock. As of the date of this prospectus, there are 4,363,641 shares of our common stock issued and outstanding. Except as described below, there are no other agreements or outstanding options, warrants or similar rights that entitle their holder to acquire from us any of our equity securities.

Holders of shares of common stock are entitled to one vote per share on all matters to be voted upon by the shareholders generally. Shareholders are entitled to receive such dividends as may be declared from time to time by the board of directors out of funds legally available therefore, and in the event of liquidation, dissolution or winding up of the company to share ratably in all assets remaining after payment of liabilities. The holders of shares of common stock have no preemptive, conversion, subscription rights or cumulative voting rights.

### Record Holders

As of the date of this prospectus, our outstanding shares of common stock were held of record by nine stockholders.

### Dividends

We do not anticipate the payment of cash dividends on our common stock in the foreseeable future.

### Senior Secured Convertible Promissory Notes

In October 2014, we issued senior secured convertible promissory notes, which we refer to as our “convertible notes”, in the aggregate principal amount of \$6 million. The interest accrues on the unpaid principal amount under the convertible notes at the rate of six percent (6%) per year, except during any event of default under the convertible notes in which case the interest rate shall be twelve percent (12%) per year. All principal and interest under the convertible notes are due and payable on December 31, 2015. All principal and interest under the convertible notes are convertible into shares of common stock as follows:

- Upon the consummation of an initial public offering by us, all principal and interest shall automatically convert at 50% of the IPO price, provided, however, in no event shall the conversion price be greater than \$2.50 nor less than \$1.67 per share;
- In the event of a subsequent private placement approved by the holders of 50% or more of the aggregate principal amount of all convertible notes, all principal and interest shall automatically convert at 50% of the offer price in the subsequent private placement, provided, however, in no event shall the conversion price be greater than \$2.50 nor less than \$1.67 per share; and
- Until the 10<sup>th</sup> day prior to the consummation of an IPO by us, a holder of the convertible note, at its option, may convert at a conversion price of \$2.50 per share.

We granted to the holders of the convertible notes one-time demand registration rights exercisable by the holders of 50% or more of the aggregate principal amount of all notes and certain piggyback registration rights. However, the note holders have agreed that in connection with the present offering the holders of the notes will not sell, transfer or pledge, or offer to do any of the same, directly or indirectly, any of our securities for a period 180 days following the date of this offering, which may be extended under certain circumstances for up to a total of 216 days following this offering.

We have issued and outstanding convertible promissory notes in the aggregate principal amount of \$6 million, with accrued and unpaid interest as of March 31, 2015 in the amount of \$154,356. Pursuant to the terms of our convertible notes, all principal and accrued interest under the notes will automatically convert into shares of our common stock, at the conversion price of \$2.50 per share.

### Stock Incentive Plan

We have adopted the Aqua Metals 2014 Stock Incentive Plan providing for the grant of non-qualified stock options and incentive stock options to purchase shares of our common stock and for the grant of restricted and unrestricted share grants. We have reserved 1,363,637 shares of our common stock under the plan. The purpose of the plan is to provide eligible participants with an opportunity to acquire an ownership interest in our company. All officers, directors, employees and consultants to our company are eligible to participate under the plan. The plan provides that options may not be granted at an exercise price less than the fair market value of our common shares on the date of grant. As of the date of this prospectus, we have outstanding options to purchase an aggregate of 584,547 shares of our common stock, of which 559,547 options are exercisable at \$3.56 per share and 25,000 options are exercisable at \$4.26 per share.

## Warrants

Upon the completion of this offering, we will have outstanding the following warrants to purchase shares of our common stock:

- warrants to purchase 436,365 shares of our common stock at an exercise price of \$0.003 per share, which warrants were issued on September 8, 2014 to Liquid Patent Consulting, LLC as consideration for consulting services (some of which warrants were subsequently transferred by Liquid Patent Consulting, LLC to other persons);
- warrants to purchase 246,175 shares of our common stock at an exercise price of \$3.00 per share, which warrants were issued on October 31, 2014 to National Securities Corporation as consideration for financial advisory services in connection with our October 2014 convertible note financing (some of which warrants were subsequently transferred by National Securities Corporation to other persons); and
- the underwriters' warrant to purchase a number of shares of our common stock equal to 10% of the number of shares of common stock sold in this offering, including the over-allotment, at an exercise price equal to 120% of the price of the common stock sold in this offering.

The warrants contain provisions for the adjustment of the exercise price and the number of shares issuable upon the exercise of the warrants in the event of certain stock dividends, stock splits, reorganizations, reclassifications and consolidations. The holders of the shares issuable upon exercise of the warrants are entitled to registration rights with respect to such shares as described in greater detail under the heading “—Registration Rights” below.

## Registration Rights

Following the completion of this offering, certain holders of an aggregate of 3,144,283 shares of our common stock, or their permitted transferees, are entitled to rights with respect to the registration under the Securities Act of their shares of common stock, including demand registration rights and piggyback registration rights. These rights are provided under the terms of two registration rights agreements between us and the holders of our capital stock. In any registration made pursuant to these agreements, all fees, costs and expenses of the registrations will be borne by us, and all selling expenses, including estimated underwriting discounts and selling commissions, will be borne by the holders of the shares being registered.

In connection with our October 2014 convertible note financing, in which we issued \$6.0 million principal amount of our convertible notes, which notes will automatically convert into an aggregate of 2,461,743 shares of our common stock effective upon the completion of this offering. We entered into a registration rights agreement with the convertible note purchasers pursuant to which we will be required, upon the written request at any time more than 180 days after the completion of this offering by the holders of at least 50% of the shares that are entitled to registration rights under the agreement, to register, as soon as practicable, all or a portion of these shares for public resale. We are required to effect only one registration pursuant to this provision of the registration rights agreement. These demand registration rights terminate as to each investor when their shares subject to the registration rights agreement may be sold by the investor pursuant to Rule 144 under the Securities Act without regard to both the volume limitations for sales as provided in Rule 144.

In connection with our issuance to Liquid Patent Consulting, LLC of warrants to purchase 436,365 shares of our common stock and our issuance to National Securities Corporation of a warrant to purchase an aggregate 246,175 shares of our common stock in connection with the October 2014 private placement of convertible notes, we entered into a registration rights agreement with Liquid Patent Consulting, LLC and National Securities Corporation pursuant to which we will be required, upon the written request at any time more than 180 days after the completion of this offering by the holders of at least 50% of the shares that are entitled to registration rights under that agreement and the registration rights agreement entered into with the convertible note investors, as a group, to register, as soon as practicable, all or a portion of these shares for public resale. We are required to effect only one registration pursuant to this provision of the registration rights agreement. These demand registration rights terminate as to each stockholder when their shares subject to the registration rights agreement may be sold by the investor pursuant to Rule 144 under the Securities Act without regard to both the volume limitations for sales as provided in Rule 144.

In addition, the two above-mentioned registration rights agreements each contain piggyback registration rights with respect our capital stock held by these investors. These piggyback registration rights terminate with respect to each stockholder when their shares subject to the registration rights agreement may be sold by the stockholder pursuant to Rule 144 under the Securities Act without regard to both the volume limitations for sales as provided in Rule 144.

If we register any of our securities for our own account, after the completion of this offering, the holders of these shares are entitled to include their shares in the registration. Both we and the underwriters of any underwritten offering have the right to limit the number of shares registered by these holders for marketing reasons, subject to limitations set forth in the respective agreements with these investors.

### **Anti-Takeover Effects of Certain Provisions of Delaware Law and Our Charter Documents**

The following is a summary of certain provisions of Delaware law, our Certificate of Incorporation and our bylaws. This summary does not purport to be complete and is qualified in its entirety by reference to the corporate law of Delaware and our Certificate of Incorporation and bylaws.

*Effect of Delaware Anti-Takeover Statute.* We are subject to Section 203 of the Delaware General Corporation Law, an anti-takeover law. In general, Section 203 prohibits a Delaware corporation from engaging in any business combination (as defined below) with any interested stockholder (as defined below) for a period of three years following the date that the stockholder became an interested stockholder, unless:

- prior to that date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares of voting stock outstanding (but not the voting stock owned by the interested stockholder) those shares owned by persons who are directors and officers and by excluding employee stock plans in which employee participants do not have the right to determine whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or subsequent to that date, the business combination is approved by the board of directors of the corporation and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

Section 203 defines “business combination” to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;
- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- subject to limited exceptions, any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation, or who beneficially owns 15% or more of the outstanding voting stock of the corporation at any time within a three-year period immediately prior to the date of determining whether such person is an interested stockholder, and any entity or person affiliated with or controlling or controlled by any of these entities or persons.

*Effect of California Corporation Long-Arm Statute.* We are a Delaware corporation, governed by the Delaware General Corporation Law; however, our headquarters, property and officers are located in California. Section 2115 of the California Corporations Code (the “California Corporation Long-Arm Statute”) purports to impose on corporations like us certain portions of California’s laws governing corporations formed under the laws of the State of California. While disputes have arisen regarding the enforceability of the California Corporation Long-Arm Statute, the statute purports to apply the California Corporations Code in the following areas of governance to corporations that meet the test for applicability for the California Corporation Long-Arm Statute: Chapter 1 (general provisions and definitions), to the extent applicable to the following

provisions; Section 301 (annual election of directors); Section 303 (removal of directors without cause); Section 304 (removal of directors by court proceedings); Section 305, subdivision (c) (filling of director vacancies where less than a majority in office elected by shareholders); Section 309 (directors' standard of care); Section 316 (excluding paragraph (3) of subdivision (a) and paragraph (3) of subdivision (f) (liability of directors for unlawful distributions); Section 317 (indemnification of directors, officers, and others); Sections 500 to 505, inclusive (limitations on corporate distributions in cash or property); Section 506 (liability of shareholder who receives unlawful distribution); Section 600, subdivisions (b) and (c) (requirement for annual shareholders' meeting and remedy if same not timely held); Section 708, subdivisions (a), (b), and (c) (shareholder's right to cumulate votes at any election of directors); Section 710 (supermajority vote requirement); Section 1001, subdivision (d) (limitations on sale of assets); Section 1101 (provisions following subdivision (e)) (limitations on mergers); Section 1151 (first sentence only) (limitations on conversions); Section 1152 (requirements of conversions); Chapter 12 (commencing with Section 1200) (reorganizations); Chapter 13 (commencing with Section 1300) (dissenters' rights); Sections 1500 and 1501 (records and reports); Section 1508 (action by Attorney General); Chapter 16 (commencing with Section 1600) (rights of inspection).

We believe it is likely that we meet the test for the application of the California Corporation Long-Arm Statute and do not anticipate a specific time in the future when we would not meet such test. The California Corporation Long-Arm Statute, if applicable, would purport to require a different outcome for certain important activities fundamental to the governance of corporations, and you are encouraged to review the effect of the California Long-Arm Statute to determine whether the differences from the Delaware General Corporation Law are important to you.

*Our Charter Documents.* Our charter documents include provisions that may have the effect of discouraging, delaying or preventing a change in control or an unsolicited acquisition proposal that a stockholder might consider favorable, including a proposal that might result in the payment of a premium over the market price for the shares held by our stockholders. Certain of these provisions are summarized in the following paragraphs.

*Effects of authorized but unissued common stock.* One of the effects of the existence of authorized but unissued common stock may be to enable our board of directors to make more difficult or to discourage an attempt to obtain control of our Company by means of a merger, tender offer, proxy contest or otherwise, and thereby to protect the continuity of management. If, in the due exercise of its fiduciary obligations, the board of directors were to determine that a takeover proposal was not in our best interest, such shares could be issued by the board of directors without stockholder approval in one or more transactions that might prevent or render more difficult or costly the completion of the takeover transaction by diluting the voting or other rights of the proposed acquirer or insurgent stockholder group, by putting a substantial voting block in institutional or other hands that might undertake to support the position of the incumbent board of directors, by effecting an acquisition that might complicate or preclude the takeover, or otherwise.

*Cumulative Voting.* Our Certificate of Incorporation does not provide for cumulative voting in the election of directors, which would allow holders of less than a majority of the stock to elect some directors.

*Vacancies.* Our Certificate of Incorporation provides that all vacancies may be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum.

*Special Meeting of Stockholders and Stockholder Action by Written Consent.* A special meeting of stockholders may only be called by our president, board of directors or such officers or other persons as our board may designate at any time and for any purpose or purposes as shall be stated in the notice of the meeting. Our charter documents do not allow stockholders to take action by written consent. Therefore, stockholders, without the assistance of management, will be unable to propose a vote on any transaction that would delay, defer or prevent a change of control, even if the transaction were in the best interests of our stockholders.

*Forum Selection.* Our bylaws provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, (iii) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law or our certificate of incorporation or bylaws, or (iv) any action asserting a claim governed by the internal affairs doctrine.

### **Transfer Agent and Registrar**

Upon the closing of this offering, the transfer agent and registrar for our common stock will be VStock Transfer, LLC, located at 18 Lafayette Place, Woodmere, New York 11598.

## SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for shares of our common stock. Future sales of substantial amounts of shares of common stock, including shares issued upon the exercise of outstanding warrants and options, in the public market after this offering, or the possibility of these sales occurring, could adversely affect the prevailing market price for our common stock or impair our ability to raise equity capital.

Upon the completion of this offering, a total of 12,825,384 shares of common stock will be outstanding, assuming the automatic conversion of all outstanding convertible notes into shares of common stock in connection with the completion of this offering. All 6,000,000 shares of common stock sold in this offering by us, plus any shares sold upon exercise of the underwriters' over-allotment option, will be freely tradable in the public market without restriction or further registration under the Securities Act, unless these shares are held by "affiliates," as that term is defined in Rule 144 under the Securities Act.

The remaining 6,825,384 shares of common stock will be "restricted securities," as that term is defined in Rule 144 under the Securities Act. These restricted securities are eligible for public sale only if they are registered under the Securities Act or if they qualify for an exemption from registration under Rules 144 or 701 under the Securities Act, which are summarized below.

Subject to the lock-up agreements described below and the provisions of Rules 144 and 701 under the Securities Act, these restricted securities will be available for sale in the public market beginning more than 180 days after the date of this prospectus.

### **Rule 144**

In general, under Rule 144 as currently in effect, once we have been subject to public company reporting requirements for at least 90 days, a person who is not deemed to have been one of our affiliates for purposes of the Securities Act at any time during the 90 days preceding a sale and who has beneficially owned the shares proposed to be sold for at least six months, including the holding period of any prior owner other than our affiliates, is entitled to sell such shares without complying with the manner of sale, volume limitation, or notice provisions of Rule 144, subject to compliance with the public information requirements of Rule 144. If such a person has beneficially owned the shares proposed to be sold for at least one year, including the holding period of any prior owner other than our affiliates, then such person is entitled to sell such shares without complying with any of the requirements of Rule 144.

In general, under Rule 144, as currently in effect, our affiliates or persons selling shares on behalf of our affiliates are entitled to sell upon expiration of the lock-up agreements described below, within any three-month period beginning 90 days after the date of this prospectus, a number of shares that does not exceed the greater of:

- 1% of the number of shares of common stock then outstanding; or
- the average weekly trading volume of the common stock during the four calendar weeks preceding the filing of a notice on Form 144 with respect to such sale.

Sales under Rule 144 by our affiliates or persons selling shares on behalf of our affiliates are also subject to certain manner of sale provisions and notice requirements and to the availability of current public information about us.

### **Rule 701**

Rule 701 generally allows a stockholder who purchased shares of our common stock pursuant to a written compensatory plan or contract and who is not deemed to have been one of our affiliates during the immediately preceding 90 days to sell these shares in reliance upon Rule 144, but without being required to comply with the public information, holding period, volume limitation, or notice provisions of Rule 144. Rule 701 also permits our affiliates to sell their Rule 701 shares under Rule 144 without complying with the holding period requirements of Rule 144. However, all holders of Rule 701 shares are required to wait until 90 days after the date of this prospectus before selling such shares pursuant to Rule 701.

## **Lock-Up Agreements**

We, all of our directors, officers, employees and the holders of substantially all of our common stock or securities exercisable for or convertible into our common stock outstanding immediately prior to this offering have agreed that, without the prior written consent of National Securities Corporation, we and they will not, during the period ending 12 months after the date of this prospectus, for officers, directors, employees and certain stockholders beneficially owning 5% or more of our common stock, and 180 days after the date of this prospectus, for all other stockholders:

- offer, sell, contract to sell, pledge or otherwise dispose of, directly or indirectly, any shares of common stock, capital stock, or any securities convertible into or exchangeable or exercisable for shares of common stock or other capital stock;
- make any demand for or exercise any right with respect to the registration of any shares of common stock or other such securities; or
- enter into any swap, hedge or other arrangement that transfers, in whole or in part, any of the economic consequences of ownership of our common stock.

Whether any such transaction described above is to be settled by delivery of common stock or such other securities, in cash or otherwise, or publicly disclose the intention to make any such offer, sale, pledge or disposition. This agreement is subject to certain exceptions. See “Underwriting” for additional information.

## **Registration Rights**

Upon the completion of this offering, the holders of 3,144,283 shares of common stock (including 682,540 shares of common stock underlying warrants) or their permitted transferees will be entitled to various rights with respect to the registration of these shares under the Securities Act. Registration of these shares under the Securities Act would result in these shares becoming freely tradable under the Securities Act immediately upon the effectiveness of the registration, except for shares held by affiliates. See “Description of Capital Stock—Registration Rights” for additional information.

## **Registration Statements on Form S-8**

We intend to file a registration statement on Form S-8 under the Securities Act to register all of the shares of common stock to be issued or reserved for issuance under our 2014 Stock Incentive plan. Shares covered by this registration statement will be eligible for sale in the public market, upon the expiration or release from the terms of the lock-up agreements and subject to vesting of such shares.

## UNDERWRITING

We will enter into an underwriting agreement prior to the closing of this offering with National Securities Corporation and Northland Securities, Inc., who are acting as co-managers of the several underwriters named below, with respect to the shares of our common stock subject to this offering. Subject to certain conditions, we will agree to sell to the underwriters, and the underwriters severally will agree to purchase, the number of shares of common stock indicated below opposite their respective names at the public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus, as it may be supplemented.

<b>Underwriters</b>	<b>Number of Shares</b>
National Securities Corporation	
Northland Securities, Inc.	
Total	6,000,000

The underwriters will offer the shares of our common stock subject to their acceptance and subject to prior sale. The underwriting agreement will provide that the obligations of the underwriters to severally pay for and accept delivery of the shares of common stock offered by this prospectus are subject to the approval of certain legal matters by their counsel and to certain other conditions. The underwriters will be obligated to take and pay for all of the shares of common stock if any of the shares are taken. However, the underwriters are not required to take or pay for the shares of our common stock covered by the underwriters' over-allotment option described below. A copy of the underwriting agreement has been filed as an exhibit to the registration statement of which this prospectus forms a part.

National Securities Corporation rendered advisory services to us in the past and acted as our placement agent in connection with the placement of our senior secured convertible promissory notes consummated on October 31, 2014. "Northland Capital Markets" is the trade name for certain capital markets and investment banking services of Northland Securities, Inc., member FINRA/SIPC.

We have been advised by the underwriters that the underwriters propose to offer shares of our common stock directly to the public at the public offering price set forth on the cover page of this prospectus and to certain dealers that are members of the Financial Industry Regulatory Authority, or FINRA. Any securities sold by the underwriters to such securities dealers will be sold at the public offering price less a selling concession not in excess of \$\_\_\_\_\_ per share. After the public offering of the shares, the offering price and other selling terms may be changed by the underwriters.

None of our securities included in this offering may be offered or sold, directly or indirectly, nor may this prospectus and any other offering material or advertisements in connection with the offer and sales of any of our common stock, be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons who receive this prospectus are advised to inform themselves about and to observe any restrictions relating to this offering of our common stock and the distribution of this prospectus. This prospectus is neither an offer to sell nor a solicitation of any offer to buy any of our common stock included in this offering in any jurisdiction where that would not be permitted or legal.

The underwriters have advised us that they do not intend to confirm sales to any accounts over which they exercise discretionary authority.

### **Underwriting Discount and Expenses**

The following table summarizes the underwriting discount and commission to be paid to the underwriters by us.

	<b>Without Over-Allotment</b>	<b>With Over-Allotment</b>
Public offering price	\$ 5.00	\$ 5.00
Underwriting discount to be paid to the underwriters	\$ 2,400,000	\$ 2,760,000
Net proceeds, before other expenses	\$ 27,600,000	\$ 31,740,000



We estimate the total expenses payable by us for this offering to be approximately \$3.0 million, which amount includes (i) the underwriting discount of \$2.4 million (\$2.76 million if the underwriters' over-allotment option is exercised in full), (ii) a non-accountable expense allowance of \$185,000 being paid by us to the underwriters' and (iii) other estimated company expenses of approximately \$415,000, which includes legal, accounting, printing costs and various fees associated with the registration and listing of our shares. In no event will the aggregated expenses reimbursed to the underwriters exceed \$185,000.

### **Over-Allotment Option**

We have granted to the underwriters an option, exercisable not later than 45 days after the date of this prospectus, to purchase up to an additional 900,000 shares of our common stock (up to 15% of the shares firmly committed in this offering) at the public offering price, less the underwriting discount, set forth on the cover page of this prospectus. The underwriters may exercise the option solely to cover over-allotments, if any, made in connection with this offering. If any additional shares of our common stock are purchased pursuant to the over-allotment option, the underwriters will offer these additional shares of our common stock on the same terms as those on which the other shares of common stock are being offered hereby.

### **Determination of Offering Price**

There is no current market for our common stock. The underwriters are not obligated to make a market in our securities, and even if they choose to make a market, can discontinue at any time without notice. Neither we nor the underwriters can provide any assurance that an active and liquid trading market in our securities will develop or, if developed, that the market will continue.

The public offering price of the shares offered by this prospectus has been determined by negotiation between us and the underwriters. Among the factors considered in determining the public offering price of the shares were:

- our history and our prospects;
- the industry in which we operate;
- our past and present operating results;
- the previous experience of our executive officers; and
- the general condition of the securities markets at the time of this offering.

The offering price stated on the cover page of this prospectus should not be considered an indication of the actual value of the shares. That price is subject to change as a result of market conditions and other factors, and we cannot assure you that the shares can be resold at or above the public offering price.

### **Underwriters Warrant**

We have agreed to issue to National Securities Corporation and Northland Capital Markets, and their designees, a warrant to purchase shares of our common stock (up to 10% of the shares of common stock sold in this offering). This warrant is exercisable at \$6.00 per share (120% of the price of the common stock sold in this offering), commencing on the 360<sup>th</sup> day following the effective date of this offering and expiring five years from the effective date of this offering. The warrant and the shares of common stock underlying the warrant have been deemed compensation by FINRA and are therefore subject to a one year lock-up pursuant to Rule 5110(g)(1) of FINRA. National Securities Corporation and Northland Capital Markets (or permitted assignees under the Rule) will not sell, transfer, assign, pledge, or hypothecate this warrant or the securities underlying this warrant, nor will they engage in any hedging, short sale, derivative, put, or call transaction that would result in the effective economic disposition of this warrant or the underlying securities for a period of one year from the effective date of the offering.

Pursuant to our engagement agreement with Liquid Patent Consulting, LLC, on September 8, 2014, we issued to Liquid Patent Consulting, LLC a warrant to purchase 436,365 shares of our common stock at an exercise price of \$0.003 per share over a three-year term. The warrant was issued in consideration of Liquid Patent Consulting's provision of services relating to the design, development and implementation of our intellectual property. The warrant includes customary anti-dilution and net issuance provisions. The warrant also provides its holder with certain demand and piggyback registration rights. The principals of Liquid Patent Consulting hold investment banking positions with National Securities Corporation.

## **Lock-Up Agreements**

All of our officers, directors, employees, stockholders beneficially owning 5% or more of our common stock and Liquid Patent Consulting, LLC, and its transferees (with respect to the warrants originally issued on September 8, 2014) have agreed that, until the one year anniversary of the date of the Underwriting Agreement we will enter into in conjunction with this offering, they will not sell, contract to sell, grant any option for the sale or otherwise dispose of any of our equity securities, or any securities convertible into or exercisable or exchangeable for our equity securities, without the consent of the underwriters (and in the case of Liquid Patent Consulting, LLC also the Company), except for exercise or conversion of currently outstanding warrants, options and convertible securities, as applicable; and exercise of options under our 2014 Stock Incentive Plan (the “One Year Lock-Up”). The number of currently outstanding shares of common stock subject to the One Year Lock-Up totals 4,363,641 shares, the number of shares underlying options and warrants subject to the One Year Lock-Up totals 1,267,087 shares.

The purchasers of our senior secured convertible promissory notes are subject to lock-up requirements for periods that may last no more than 180 days following the date of this prospectus (the “180 Days Lock-Up”). The number of shares of common stock to be issued to the holders of our senior secured convertible promissory notes that will be subject to the 180 Days Lock-Up as of March 31, 2015 totals 2,461,743 shares. The warrant to purchase up to 10% of the shares of common stock sold in this offering that we have agreed to issue to the underwriters in connection with this offering will also be subject to the 180 Days Lock-up.

Other than in respect of the 10% warrant being issued to the underwriters in connection with this offering, the underwriters may consent to an early release from the lock-up period if, in their opinion, the market for the common stock would not be adversely impacted by sales and in cases of a financial emergency of an officer, director or other stockholder. We are unaware of any security holder who intends to ask for consent to dispose of any of our equity securities during the relevant lock-up periods.

## **Indemnification**

We will agree to indemnify the underwriters against certain liabilities, including certain liabilities arising under the Securities Act, and to contribute to payments that the underwriters may be required to make for these liabilities.

## **Short Positions and Penalty Bids**

The underwriters may engage in over-allotment, syndicate covering transactions, and penalty bids or purchases for the purpose of pegging, fixing or maintaining the price of the common stock, in accordance with Regulation M under the Exchange Act.

- Over-allotment involves sales by the underwriters of shares in excess of the number of shares the underwriters are obligated to purchase, which creates a syndicate short position. The short position may be either a covered short position or a naked short position. In a covered short position, the number of shares over-allotted by the underwriters is not greater than the number of shares that they may purchase in the over-allotment option. In a naked short position, the number of shares involved is greater than the number of shares in the over-allotment option. The underwriters may close out any short position by either exercising their over-allotment option and/or purchasing shares in the open market.
- Syndicate covering transactions involve purchases of the common stock in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares to close out the short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the over-allotment option. If the underwriters sell more shares than could be covered by the over-allotment option, a naked short position, the position can only be closed out by buying shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there could be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.
- Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the shares originally sold by the syndicate member are purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.

These syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of the common stock. As a result, the price of the common stock may be higher than the price that might otherwise exist in the open market. These transactions may be effected on the NASDAQ Capital Market, and if commenced, they may be discontinued at any time.

Neither we nor the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of the common stock. In addition, neither we nor the underwriters make any representation that the underwriters will engage in these transactions or that any transaction, once commenced, will not be discontinued without notice.

### **Electronic Distribution**

A prospectus in electronic format may be made available on the Internet sites or through other online services maintained by the underwriters or by their affiliates. In those cases, prospective investors may view offering terms online and, depending upon the underwriters, prospective investors may be allowed to place orders online. The underwriters may agree with us to allocate a specific number of shares for sale to online brokerage account holders. Any such allocation for online distributions will be made by the underwriters on the same basis as other allocations.

Other than the prospectus in electronic format, the information on the underwriters' websites and any information contained in any other website maintained by the underwriters is not part of the prospectus or the registration statement of which this prospectus forms a part, has not been approved and/or endorsed by us or the underwriters in their capacity as underwriter and should not be relied upon by investors.

The underwriters' compensation in connection with this offering is limited to the fees and expenses described above under "Underwriting Discount and Expenses."

### **LEGAL MATTERS**

Greenberg Traurig, LLP, Irvine, California, will pass upon the validity of the shares of common stock offered by this prospectus and certain other legal matters. Golenbock Eiseman Assor Bell & Peskoe LLP, New York, New York, is legal counsel to National Securities Corporation.

### **EXPERTS**

The financial statements of Aqua Metals, Inc. as of December 31, 2014 and for the period June 20, 2014 (inception) through December 31, 2014 included in this prospectus have been audited by Armanino LLP, independent registered public accounting firm as set forth in their report. We have included these financial statements in this prospectus in reliance upon the report of Armanino LLP, given on their authority as experts in accounting and auditing.

### **WHERE YOU CAN FIND MORE INFORMATION**

We have filed with the SEC a registration statement on Form S-1 under the Securities Act that registers the shares of our common stock to be sold in this offering. Our SEC filings are and will become available to the public over the Internet at the SEC's website at [www.sec.gov](http://www.sec.gov). You may also read and copy any document we file with the SEC at its public reference facilities at 100 F Street N.E., Washington, D.C. 20549. You can also obtain copies of the documents upon the payment of a duplicating fee to the SEC. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities.

This prospectus does not contain all of the information set forth in the registration statement and the exhibits and schedules thereto. Some items are omitted in accordance with the rules and regulations of the SEC. You should review the information and exhibits included in the registration statement for further information about us and the securities we are offering. Statements in this prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings. You should review the complete document to evaluate these statements.

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## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FRIM

To the Board of Directors  
Aqua Metals, Inc.  
Oakland, California

We have audited the accompanying consolidated financial statements of Aqua Metals, Inc. and subsidiaries (“Company”), which comprise the balance sheet as of December 31, 2014, and the related statements of operations, stockholders’ equity (deficit), and cash flows for the period from June 20, 2014 (inception) to December 31, 2014, and the related notes to the consolidated financial statements.

### Management’s Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### Auditor’s Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor’s judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity’s preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity’s internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Aqua Metals, Inc. and subsidiaries as of December 31, 2014, and the results of their operations and their cash flows for the period from June 20, 2014 (inception) to December 31, 2014, in conformity with accounting principles generally accepted in the United States of America.

### Emphasis of Matter

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, at December 31, 2014, the Company is in its development stage, has not yet generated revenues and is dependent upon future sources of equity or debt financing in order to fund its operations. These conditions raise substantial doubt about the Company’s ability to continue as a going concern. Management’s plans regarding those matters also are described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Armanino<sup>LLP</sup>  
San Ramon,  
California

May 8, 2015 (except for the matters disclosed in Note 10, including the reverse stock split, dated from June 9, 2015 through June 30, 2015, for which the date is June 30, 2015)

**AQUA METALS, INC.**  
**Consolidated Balance Sheets**

	<u>December 31,</u> <u>2014</u>	<u>March 31,</u> <u>2015</u>
		<i>Unaudited</i>
<u>ASSETS</u>		
Current assets		
Cash and cash equivalents	\$ 4,536,601	\$ 3,685,803
Inventory	—	149,250
Prepaid expenses and other current assets	11,906	31,984
Total current assets	<u>4,548,507</u>	<u>3,867,037</u>
Non-current assets		
Property and equipment, net	245,641	345,382
Intellectual property, net	1,028,554	1,001,737
Total non-current assets	<u>1,274,195</u>	<u>1,347,119</u>
Total assets	<u>\$ 5,822,702</u>	<u>\$ 5,214,155</u>
<u>LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)</u>		
Current liabilities		
Accounts payable	\$ 40,306	\$ 90,023
Accrued expenses	12,292	40,480
Accrued interest	65,589	154,356
Convertible notes, net	5,090,589	5,317,942
Total current liabilities	<u>5,208,776</u>	<u>5,602,801</u>
Derivative liabilities	1,384,782	5,280,861
Total liabilities	<u>6,593,558</u>	<u>10,883,662</u>
Commitments and contingencies	—	—
Stockholders' equity (deficit)		
Common stock; \$0.001 par; 50,000,000 shares authorized; 4,363,641 shares issued and outstanding	4,364	4,364
Additional paid-in capital	1,598,531	1,598,531
Accumulated deficit	(2,373,751)	(7,272,402)
Total stockholders' deficit	<u>(770,856)</u>	<u>(5,669,507)</u>
Total liabilities and stockholders' deficit	<u>\$ 5,822,702</u>	<u>\$ 5,214,155</u>

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

**AQUA METALS, INC.**  
**Consolidated Statements of Operations**

	<b>Period from Inception (June 20, 2014) to December 31, 2014</b>	<b>Three Months Ended March 31, 2015</b>
		<i>Unaudited</i>
Operating expenses		
Operations and development costs	\$ 231,043	\$ 213,591
Business development and management costs	1,175,613	471,623
Total operating expenses	<u>1,406,656</u>	<u>685,214</u>
Loss from operations	<u>(1,406,656)</u>	<u>(685,214)</u>
Other expenses (income)		
Interest expense	216,919	316,534
Increase in fair value of derivative liabilities	1,172,627	3,896,079
Interest income	(1,039)	(1,444)
Other income	<u>(370)</u>	<u>(132)</u>
Total other expenses, net	<u>1,388,137</u>	<u>4,211,037</u>
Loss before income tax expense (benefit)	(2,794,793)	(4,896,251)
Income tax expense (benefit)	<u>(421,042)</u>	<u>2,400</u>
Net loss	<u>\$ (2,373,751)</u>	<u>\$ (4,898,651)</u>
Weighted average shares outstanding, basic and diluted	<u>4,363,641</u>	<u>4,363,641</u>
Basic and diluted net loss per common share	<u>\$ (0.54)</u>	<u>\$ (1.12)</u>

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

**AQUA METALS, INC.**  
**Consolidated Statements Stockholders' Equity (Deficit)**

	<u>Common Stock</u>		<u>Additional</u>	<u>Accumulated</u>	<u>Total</u>
	<u>Shares</u>	<u>Amount</u>	<u>Paid-in</u>	<u>Deficit</u>	<u>Stockholders'</u>
			<u>Capital</u>		<u>Equity (Deficit)</u>
Balances, June 20, 2014 (inception)	—	\$ —	\$ —	\$ —	\$ —
Common stock issued as reimbursement for expenses paid by founders	261,819	262	39,575	—	39,837
Common stock issued for intellectual property contributed by founders	4,101,822	4,102	633,056	—	637,158
Issuance of consulting warrants	—	—	713,745	—	713,745
Debt discount - beneficial conversion feature on convertible notes	—	—	212,155	—	212,155
Net loss	—	—	—	(2,373,751)	(2,373,751)
Balances, December 31, 2014	4,363,641	\$ 4,364	\$ 1,598,531	\$ (2,373,751)	\$ (770,856)
Net loss, three months ended March 31, 2015 (unaudited)	—	—	—	(4,898,651)	(4,898,651)
Balances March 31, 2015 (unaudited)	4,363,641	\$ 4,364	\$ 1,598,531	(7,272,402)	\$ (5,669,507)

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



**AQUA METALS, INC.**  
**Consolidated Statements of Cash Flows**

	<b>Period from Inception (June 20, 2014) to December 31, 2014</b>	<b>Three Months Ended March 31, 2015</b>
		<i>Unaudited</i>
<b>Cash flows from operating activities</b>		
Net loss	\$ (2,373,751)	\$ (4,898,651)
Reconciliation of net loss to net cash used in operating activities		
Depreciation	1,298	3,846
Amortization of intellectual property	44,125	26,817
Fair value of warrants issued for consulting services	713,745	—
Fair value of common stock issued as reimbursement for expenses paid by founders	39,837	—
Change in fair value of derivative liabilities	1,172,627	3,896,079
Amortization of debt discount	151,568	227,353
Income tax benefit	(421,842)	—
Changes in operating assets and liabilities		
Inventory	—	(149,250)
Prepaid expenses and other assets	(11,906)	(20,078)
Accounts payable	40,306	49,717
Accrued expenses	77,881	116,956
Net cash used in operating activities	<u>(566,112)</u>	<u>(747,211)</u>
<b>Cash flows from investing activities</b>		
Capital expenditures for fixed assets	(246,940)	(103,587)
Capital expenditures for intellectual property	(13,678)	—
Net cash used in investing activities	<u>(260,618)</u>	<u>(103,587)</u>
<b>Cash flows from financing activities</b>		
Issuance of convertible note, net of issuance costs	5,363,331	—
Net cash provided by financing activities	<u>5,363,331</u>	<u>—</u>
Net increase (decrease) in cash and cash equivalents	4,536,601	(850,798)
Cash and cash equivalents at beginning of period	<u>—</u>	<u>4,536,601</u>
Cash and cash equivalents at end of period	<u>\$ 4,536,601</u>	<u>\$ 3,685,803</u>
<b><u>Non-cash financing activities</u></b>		
Fair value of consulting warrants	\$ 713,745	\$ —
Fair value of common stock issued for intellectual property, net of tax	637,158	—
Fair value of common stock issued to founders of expenses prior to inception	39,837	—
Total non-cash financing activities	<u>\$ 1,390,740</u>	<u>\$ —</u>

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

**AQUA METALS, INC.**  
**Notes to Consolidated Financial Statements**  
**December 31, 2014 and March 31, 2015**  
**(Information as of March 31, 2015 and for the three months**  
**Ended March 31, 2015 is unaudited)**

**1. Summary of Significant Accounting Policies**

Organization

Aqua Metals, Inc. (the "Company") was incorporated in Delaware on June 20, 2014 and commenced operations on June 20, 2014 (inception). On January 27, 2015, the Company formed two wholly-owned subsidiaries, Aqua Metals Reno, Inc. and Aqua Metals Operations, Inc. ("Subsidiaries"), both incorporated in Delaware. The Subsidiaries have had limited transactions to date and are included in the consolidated financial statements dated March 31, 2015 (unaudited). The Company has developed an innovative process for recycling lead acid batteries. The Company intends to manufacture the equipment it has developed, and will also operate lead acid battery recycling facilities.

Use of estimates

The preparation of the consolidated financial statements requires management of the Company to make a number of estimates and assumptions relating to the reported amount of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the consolidated financial statements, and the reported amounts of expenses during the period. Significant items subject to such estimates and assumptions include the carrying amount and valuation of long-lived assets, the valuation of conversion features of convertible debt, and the determination of the fair value of stock warrants issued. Actual results could differ from those estimates.

Unaudited Interim Financial Data

The accompanying balance sheet as of March 31, 2015, statement of stockholders' equity (deficit) for the three months ended March 31, 2015 and statements of operations and cash flows for the three months ended March 31, 2015 are unaudited. The unaudited interim financial statements have been prepared on a basis consistent with the audited financial statements, pursuant to the rules and regulations of the SEC for interim financial statements. Certain information and footnote disclosures normally included in financial statements prepared in accordance with U.S. GAAP have been condensed or omitted pursuant to such rules and regulations. However, the Company believes that the disclosures are adequate to make the information presented not misleading. These financial statements should be read in conjunction with the Company's audited consolidated financial statements and the notes thereto for the period ended December 31, 2014. In the opinion of management, the consolidated financial statements reflect all adjustments (consisting of normal recurring adjustments) considered necessary to state fairly the Company's financial position as of March 31, 2015 and the results of operations and cash flows for the three months ended March 31, 2015. The results for the three months ended March 31, 2015 are not necessarily indicative of the results to be expected for the year ending December 31, 2015 or for any other interim period.

Going Concern and Management Plans

As of December 31, 2014 and March 31, 2015, the Company's cash on hand was \$4,536,601 and \$3,685,803 respectively. The Company has not generated revenues since its inception and has incurred net loss of \$2,373,751 and \$4,898,651 for the period from June 20, 2014 (inception) through December 31, 2014 and the three months ended March 31, 2015, respectively. To date, the Company has met its liquidity requirements principally through the private placement of convertible notes.

The Company expects that the cash it has available as of June 8, 2015 will fund its operations only until December 2015. The Company intends to raise additional capital through its initial public offering ("IPO"), through there is no assurances that it will be able to do so. If the Company is unable to raise additional capital, the Company may have to curtail its research and development efforts, delay repayments of its convertible notes, delay payments to vendors, and/or initiate cost reductions, which would have a material adverse effect on the Company's business, financial condition and results of operations. These matters raise substantial doubt about the Company's ability to continue as a going concern. The accompanying consolidated financial statements do not include any adjustments that might be necessary if the Company is unable to continue as a going concern.

**AQUA METALS, INC.**  
**Notes to Consolidated Financial Statements**  
**December 31, 2014 and March 31, 2015**  
**(Information as of March 31, 2015 and for the three months**  
**Ended March 31, 2015 is unaudited)**

**1. Summary of Significant Accounting Policies (cont'd)**

Cash and cash equivalents

The Company considers all highly liquid instruments with original or remaining maturities of 90 days or less at the date of purchase to be cash equivalents. The Company maintains its cash balances in large financial institutions. Periodically, such balances may be in excess of federally insured limits.

Property and equipment

Property and equipment are stated at cost net of accumulated depreciation. Depreciation on property and equipment is calculated on the straight-line basis over the estimated useful lives of the assets. Leasehold improvements are depreciated over the shorter of the life of the asset or the remaining term of the lease.

Intangible and other long-lived assets

The intangible asset consists of a patent application contributed to the Company by five founding stockholders. The useful life of the asset has been determined to be ten years and the asset is being amortized. The Company periodically evaluates its intangible and other long-lived assets for indications that the carrying amount of an asset may not be recoverable. In reviewing for impairment, the Company compares the carrying value of such assets to the estimated undiscounted future cash flows expected from the use of the assets and their eventual disposition. When the estimated undiscounted future cash flows are less than their carrying amount, an impairment loss is recognized equal to the difference between the assets' fair value and their carrying value. In addition to the recoverability assessment, the Company routinely reviews the remaining estimated lives of its long-lived assets. Any reduction in the useful life assumption will result in increased depreciation and amortization expense in the period when such determination is made, as well as in subsequent periods. The Company performed an impairment analysis on intellectual property for the quarter ended December 31, 2014 and concluded there was no impairment. The Company determined that the estimated life of the intellectual property properly reflected the current remaining economic life of the asset.

Research and development

Research and development expenditures are expensed as incurred.

Income taxes

The Company accounts for income taxes in accordance with the liability method of accounting for income taxes. Under the liability method, deferred assets and liabilities are recognized based upon anticipated future tax consequences attributable to differences between financial statement carrying amounts of assets and liabilities and their respective tax bases. The provision for income taxes is comprised of the current tax liability and the changes in deferred tax assets and liabilities. The Company establishes a valuation allowance to the extent that it is more likely than not that deferred tax assets will not be recoverable against future taxable income.

The Company recognizes the effect of uncertain income tax positions only if those positions are more likely than not of being sustained. Recognized income tax positions are measured at the largest amount that is greater than 50% likely of being realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs. Prior to this, the Company recognized the effect of income tax positions only if such positions were probable of being sustained. This change did not have an impact on the Company's results of operations or financial condition.

**AQUA METALS, INC.**  
**Notes to Consolidated Financial Statements**  
**December 31, 2014 and March 31, 2015**  
**(Information as of March 31, 2015 and for the three months**  
**Ended March 31, 2015 is unaudited)**

**1. Summary of Significant Accounting Policies (cont'd)**

Convertible instruments

The Company accounts for hybrid contracts that feature conversion options in accordance with ASC 815 “Derivative and Hedging Activities,” (“ASC 815”) and ASC 480 “Distinguishing Liabilities from Equity” (“ASC 480”), which require companies to bifurcate conversion options from their host instruments and account for them as free standing derivative financial instruments according to certain criteria. The criteria includes circumstances in which (i) the economic characteristics and risks of the embedded derivative instrument are not clearly and closely related to the economic characteristics and risks of the host contract, (ii) the hybrid instrument that embodies both the embedded derivative’s instrument and the host contract is not re-measured at fair value under otherwise applicable generally accepted accounting principles with changes in fair value reported in earnings as they occur and (iii) a separate instrument with the same terms as the embedded derivative instrument would be considered a derivative instrument. The Company accounts for convertible instruments which have been determined to be free standing derivative financial instruments (when the Company has determined that the embedded conversion options should be bifurcated from their host instruments) in accordance with ASC 815. Under ASC 815, a portion of the proceeds received upon the issuance of the hybrid contract are allocated to the fair value of the derivative. The derivative is subsequently marked to market each reporting date based on current fair value, with the changes in fair value reported in results of operations.

Fair value measurements

The carrying amounts of cash and cash equivalents, prepaid expenses, accounts payable and accrued expenses approximate fair value due to the short-term nature of these instruments.

Fair value is defined as an exit price, representing the amount that would be received upon the sale of an asset or payment to transfer a liability in an orderly transaction between market participants. Fair value is a market-based measurement that is determined based on assumptions that market participants would use in pricing an asset or liability. A three-tier fair value hierarchy is used to prioritize the inputs in measuring fair value as follows:

Level 1. Quoted prices in active markets for identical assets or liabilities.

Level 2. Quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable, either directly or indirectly.

Level 3. Significant unobservable inputs that cannot be corroborated by market data.

The asset or liability’s fair value measurement within the fair value hierarchy is based upon the lowest level of any input that is significant to the fair value measurement. The following table provides a summary of the liabilities that are measured at fair value on a recurring basis at December 31, 2014, consisting of certain Financing Warrants and the conversion feature of the Company’s Convertible Notes, both of which are more fully described in Note 4:

	<u>Total</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>
Derivative liabilities				
Conversion feature	\$ 1,108,955	\$ —	\$ —	\$ 1,108,955
Financing Warrants	275,827	—	—	275,827
Total	<u>\$ 1,384,782</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 1,384,782</u>

**AQUA METALS, INC.**  
**Notes to Consolidated Financial Statements**  
**December 31, 2014 and March 31, 2015**  
**(Information as of March 31, 2015 and for the three months**  
**Ended March 31, 2015 is unaudited)**

**1. Summary of Significant Accounting Policies (cont'd)**

The following table provides a summary of the liabilities that are measured at fair value on a recurring basis at March 31, 2015:

	<u>Total</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>
Derivative liabilities				
Conversion feature	\$ 4,769,517	\$ —	\$ —	\$ 4,769,517
Financing Warrants	511,344	—	—	511,344
Total	<u>\$ 5,280,861</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 5,280,861</u>

The following table sets forth a summary of the changes in the fair value of the Company's Level 3 financial liabilities that are measured at fair value on a recurring basis:

Balance at inception (June 20, 2014)	\$ —
Aggregate fair value of Financing Warrants upon issuance	212,155
Change in fair value of conversion feature and Financing Warrants	1,172,627
Balance at December 31, 2014	<u>\$ 1,384,782</u>
Change in fair value of conversion feature and Financing Warrants	3,896,079
Balance at March 31, 2015	<u>\$ 5,280,861</u>

The conversion feature of the Convertible Notes was measured at fair value using a Monte Carlo simulation and is classified within Level 3 of the valuation hierarchy. The warrant liability for the Financing Warrants was measured at fair value using a Black Scholes Merton valuation model and is classified within Level 3 of the valuation hierarchy.

Level 3 liabilities are valued using unobservable inputs to the valuation methodology that are significant to the measurement of the fair value of the derivative liabilities. For fair value measurements categorized within Level 3 of the fair value hierarchy, the Company's Chief Financial officer determined its valuation policies and procedures. The development and determination of the unobservable inputs for Level 3 fair value measurements and fair value calculations are the responsibility of the Company's Chief Financial Officer with support from the Company's consultants and which are approved by the Chief Financial Officer.

Level 3 financial liabilities consist of the derivative liabilities for which there is no current market for these securities such that the determination of fair value requires significant judgment or estimation. Changes in fair value measurements categorized with Level 3 of the fair value hierarchy are analyzed each period based on changes in estimates or assumptions and recorded as appropriate.

The Company uses a Monte Carlo model to value certain Level 3 financial liabilities at inception and on subsequent valuation dates. The simulation incorporates transaction details such as the Company's stock price, contractual terms, maturity, risk free rates and volatility. The Company also used a Black Scholes Merton economic model to measure the Financing Warrants and certain Consulting Warrants (which are more fully described in Note 4) at issuance. The Financing Warrants are re-valued using a Black-Scholes Merton economic model for each reporting date.

A significant decrease in the volatility or a significant decrease in the Company's stock price, in isolation, would result in a significantly lower fair value measurement. Changes in the value of the derivative liabilities are recorded within other expense (income) in the Company's statement of operations.

In accordance with the provisions of ASC 815, the Company presents the conversion feature and Financing Warrant liability at fair value on its balance sheet, with the corresponding changes in fair value recorded in the Company's consolidated statement of operations.

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**1. Summary of Significant Accounting Policies (cont'd)**

The Company classifies as equity any contracts that (i) require physical settlement or net-share settlement or (ii) provides a choice of net-cash settlement or a settlement in the Company's own shares (physical settlement or net-share settlement) providing that such contracts are indexed to the Company's own stock as defined in ASC 815-40 (Contracts in Entity's Own Equity" (ASC 815-40"). The Company classifies as assets or liabilities any contracts that (i) require net-cash settlement (including a requirement to net cash settle the contract if an event occurs and if that event is outside the Company's control) or (ii) gives the counterparty a net-cash settlement or settlement in shares (physical settlement or net-share settlement). The Company assesses classification of common stock purchase warrants and other free standing derivatives at each reporting date to determine whether a change in classification between assets and liabilities or equity is required.

Net Loss per Share

The Company reports net loss per share in accordance with the standard codification of ASC "Earnings per Share" ("ASC 260"). Under ASC 260, basic earnings per share, which excludes dilution, is computed by dividing net loss available to common stockholders by the weighted average number of common shares outstanding for the period. Diluted earnings per share reflects the potential dilution of securities that could be exercised or converted into common shares, and is computed by dividing net loss available to common stockholders by the weighted average of common shares outstanding plus the dilutive potential common shares. Diluted earnings per share exclude the impact of convertible notes and warrants to purchase common stock, as the effect would be anti-dilutive. During a loss period, the assumed exercise of in-the-money stock warrants and other potentially diluted instruments has an anti-dilutive effect and, therefore, these instruments are excluded from the computation of dilutive earnings per share.

**2. Property and equipment, net**

Property and equipment, net, consisted of the following for the dates indicated:

<b>Asset Class</b>	<b>Useful Life (Years)</b>	<b>December 31, 2014</b>	<b>March 31, 2015</b>
Demonstration equipment	5	\$ 196,671	\$ 262,984
Shop equipment	5	18,750	18,750
Lab equipment	5	—	8,017
Computer equipment	3	11,089	26,563
Leasehold improvements	5	15,848	29,629
Office equipment	5	4,581	4,581
		<u>246,939</u>	<u>350,524</u>
Less: accumulated depreciation		<u>(1,298)</u>	<u>(5,142)</u>
		<u>\$ 245,641</u>	<u>\$ 345,382</u>

Depreciation expense was \$1,298 and \$3,844 for the period from inception (June 20, 2014) through December 31, 2014 and for the three months ended March 31, 2015, respectively.

**3. Intellectual Property**

In June 2014, five of the founding stockholders contributed the rights to certain intellectual property to the Company in exchange for the issuance of 4,101,822 shares with a fair value of \$1,059,000. This contribution was recorded as an intangible asset with an offset to additional paid in capital for \$637,158 and deferred taxes for \$421,842. The fair market value of the intellectual property was determined by management with the assistance of an independent valuation specialist using an equal weighting of the incremental cash flow and relief from royalty methodologies.

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**3. Intellectual Property (cont'd)**

Both methodologies used a discount rate of 50%. The discounted cash flow approach used a 10 year forecast and a 20% probability of achieving commercial success. The forecast assumed 85% of revenue is generated from sales of lead processed in Company owned and operated recycling plants and 15% of revenue is generated from license fees. The relief from royalty method used revenues equal to 50% of management's discounted cash flow forecast and a license rate of 1.5% of revenue.

Intellectual property, net, is comprised of the following as of the dates indicated:

	<b>December 31, 2014</b>	<b>March 31, 2015</b>
Intellectual property	\$ 1,072,679	\$ 1,072,679
Accumulated amortization	(44,125)	(70,942)
Intellectual property, net	<u>\$ 1,028,554</u>	<u>\$ 1,001,737</u>

Aggregate amortization expense for the period ended December 31, 2014 was \$44,125.

Estimated amortization expense is as follows;

	<b>Year ending December 31,</b>
2015	\$ 107,268
2016	107,268
2017	107,268
2018	107,268
2019	107,268
Thereafter	492,214
Total	<u>\$ 1,028,554</u>

**4. Private Placement**

Convertible notes

On October 31, 2014, the Company entered into a securities purchase agreement (the "Securities Purchase Agreement") with accredited investors (the "Investors"), pursuant to which the Company issued an aggregate of \$6,000,000 principal amount of senior secured convertible notes (the "Convertible Notes"). In connection with the sale of the Convertible Notes (the "Bridge Financing"), the Company entered into a registration rights agreement (the "Registration Rights Agreement") and a security agreement (the "Security Agreement") with the Investors. The closing of the Bridge Financing was completed October 31, 2014. The Convertible Notes bear interest at 6% per annum and mature on December 31, 2015.

The principal and interest of the Convertible Notes are convertible into the Company's common stock at a conversion price between \$1.67 and \$2.50 per share depending on the facts and circumstances at the time of the conversion (see below). Upon issuance, the Convertible Notes bear simple interest at 6% per annum and upon the occurrence of any specified event of default, the Convertible Notes would bear interest at 12% per annum. The Convertible Notes may be prepaid or converted into Common Stock with consent of the holders of a majority of the principal, then outstanding under all the

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**4. Private Placement (cont'd)**

Convertible Notes (the “Required Holder”) and upon certain events constituting a change in control of the Company. The Convertible Notes are required to be converted upon a qualifying IPO, if any, in which case the conversion price is to be equal to 50% of the price to the public in such offering (but not more than \$2.50 or less than \$1.67 per share). A Convertible Note may also be converted in certain circumstances at the election of the holder of the Convertible Note in connection with a financing that is not an IPO, in which case the conversion price is to be equal to 50% of the price paid by the investors in such financing (but not more than \$2.50 or less than \$1.67 per share).

In the event of an optional conversion by the holder of a Convertible Note, the conversion price would be \$2.50. The conversion price under the Convertible Notes is further subject to adjustments in the event of stock splits, combinations or the like and upon certain other events, all as provided in the Convertible Notes.

The aggregate amount of accrued interest on the Convertible Notes was \$65,589 and \$154,356 as of December 31, 2014 and March 31, 2015 respectively. As of December 31, 2014, the principal and accrued interest on the Convertible Notes were convertible into 3,592,814 and 39,275 shares of the Company’s common stock, respectively, assuming a conversion price of \$1.67 per share. As of March 31, 2015, the principal and accrued interest on the Convertible Notes were convertible into 3,376,478 and 86,864 shares of the Company’s common stock, respectively, assuming a conversion price of \$1.777 per share.

Pursuant to the terms of the Convertible Notes, the conversion price is subject to adjustments in the event of an IPO, other financing and upon certain other events. The embedded conversion feature was not clearly and closely related to the host instrument and was bifurcated from the host Convertible Notes as a derivative, principally because the instrument’s variable exercise price terms would not qualify as being indexed to the Company’s own common stock. Accordingly, this conversion feature instrument has been classified as a derivative liability in the accompanying consolidated balance sheet as of December 31, 2014 and March 31, 2015. Derivative liabilities are initially recorded at fair value and are then re-valued at each reporting date, with changes in fair value recognized in earnings during the reporting period.

The Company determined that the initial fair value of the embedded conversion option was \$212,155. From the aggregate principal amount of the Convertible Notes of \$6,000,000, the Company deducted in full the fair value of the embedded conversion feature, and offering costs of \$848,824 as a debt discount. The debt discount is being amortized under the effective interest method over the term of the Convertible Notes. The balance of Convertible Notes as of December 31, 2014 is as follows:

	<b>December 31, 2014</b>	<b>March 31, 2015</b>
Face value of the Convertible Notes	\$ 6,000,000	\$ 6,000,000
Debt discount, net of amortization	(909,410)	(682,058)
Convertible Notes, net	<u>\$ 5,090,589</u>	<u>\$ 5,317,942</u>

The Company calculated the fair value of the embedded conversion feature of the Convertible Notes using the Monte Carlo simulation, with the observable assumptions as provided in the table below. The significant unobservable inputs used in the fair value measurement of the reporting entity’s embedded conversion feature are expected stock prices, levels of trading and liquidity of the Company’s stock. Significant increases in the expected stock prices and expected liquidity would result in a significantly higher fair value measurement. Significant increases in either the probability or severity of default of the host instrument would result in a significantly lower fair value measurement.



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**4. Private Placement (cont'd)**

	As of October 31, 2014	As of December 31, 2014	As of March 31, 2015
Fair value of stock price on valuation date	\$ 1.77	\$ 2.18	\$ 3.55
High collar	\$ 2.50	\$ 2.50	\$ 2.50
Low collar	\$ 1.67	\$ 1.67	\$ 1.67
Term (years)	0.75	0.58	0.33
Expected volatility	80%	80%	80%
Weighted average risk-free interest rate	0.11%	0.14%	0.26%
Trials	50,000	50,000	50,000
Aggregate fair value	\$ 212,155	\$ 1,533,265	\$ 5,193,828

On September 8, 2014, the Company entered into an agreement (the "Placement Agent Agreement") with National Securities Corporation ("NSC") pursuant to which the Company appointed NSC to act as the Company's placement agent in connection with the sale of the Company's securities ("Offering or Offerings"). Specifically, NSC was the placement agent in connection with the sale of its Convertible Notes. The Placement Agent Agreement had an initial term of 180 days after which it will continue in effect until it's terminated by either party with 60 days written notice to the other party.

In connection with the sale of the Convertible Notes, the Company paid NSC a cash fee of \$553,490 and issued on October 31, 2014 to NSC warrants ("Financing Warrants") to purchase shares of the Company's common stock. NSC subsequently transferred a portion of the Financing Warrants to associated persons. The Financing Warrants were fully vested upon issuance, have a term of five years, and are immediately exercisable, provided that upon the Company's consummation of an IPO, the Financing Warrants may not be exercised until 90 days after the consummation of the IPO. Pursuant to the terms of the Financing Warrants, the per share exercise price is determined based upon 120% of the conversion price of the Convertible Notes upon the consummation of the IPO, or upon other events under which the Convertible Notes may convert. As of December 31, 2014 and March 31, 2015, the Financing Warrants were exercisable into 220,268 shares of the Company's common stock assuming an exercise price of \$3.00 per share (calculated as 120% of the Convertible Notes conversion price of \$2.50 per share).

The Company determined, based upon authoritative guidance that the Financing Warrants are derivative instruments. Derivative liabilities are initially recorded at fair value and are then re-valued at each reporting date, with changes in fair value recognized in earnings during the reporting period.

The warrant holders have certain registration rights with respect to the common stock issued upon exercise of the Financing Warrants.

Consulting agreement

On September 8, 2014, the Company entered into a consulting agreement with Liquid Patent Consulting, LLC ("LPC"), pursuant to which LPC agreed to provide management, strategic and intellectual property advisory services. The Consulting Agreement had an initial term of 180 days after which it will continue in effect until it is terminated by either party with 30 days written notice to the other party.

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**4. Private Placement (cont'd)**

As consideration for services provided under the Consulting Agreement the Company issued warrants ("Consulting Warrants") to LPC for the purchase of an aggregate of 436,364 shares of the Company's common stock. LPC subsequently transferred a portion of the Consulting Warrants to a third party.

The Consulting Warrants vested upon issue, have a term of three years, an exercise price of \$0.003475 per share and are immediately exercisable, provided that upon the Company's consummation of an IPO, the Consulting Warrants may not be exercised until 90 days after the consummation of the IPO. The Consulting Warrants may be exercised on a cashless basis.

The warrant holders have certain registration rights with respect to the common stock issued upon exercise of the Consulting Warrants.

The Company calculated the fair value of the Financing Warrants and the Consulting Warrants using a Black Scholes Merton model with the assumptions provided in the table below. The fair market value of the stock used was from a 409A valuation prepared by an outside consultant.

Provided below are the principal assumptions used in the initial measurement of the fair values of the Financing Warrants and Consulting Warrants and the subsequent remeasurement of the fair value of the Financing Warrants.

	<b>Consulting 09/08/14</b>	<b>Financing 10/31/14</b>	<b>Financing 12/31/14</b>	<b>Financing 03/31/15</b>
Fair market value of shares	\$ 1.64	\$ 1.77	\$ 2.18	\$ 3.55
Assumed exercise price	\$ 0.0034375	\$ 3.00	\$ 3.00	\$ 3.00
Term in years	3	5	4.84	4.59
Volatility	80%	80%	80%	80%
Annual rate of dividends	0%	0%	0%	0%
Discount rate	1.02%	1.62%	1.65%	1.37%
Call option value	\$ 1.49	\$ 0.88	\$ 1.14	\$ 2.11
Warrant shares issued	436,364	220,268	220,268	220,268
Warrants fair value	\$ 713,745	\$ 212,155	\$ 275,827	\$ 511,344

The initial fair value of the Financing Warrants was accounted for as a derivative issuance cost and along with the other private placement costs is amortized over the life of the Convertible Notes. The initial fair value of the Consulting Warrants was expensed immediately as a consulting fee and recorded within business development and management costs in the statement of operations for the period ended December 31, 2014. During the period ended December 31, 2014 and the three months ended March 31, 2015, the Company recorded an increase of \$63,672 and \$235,517, respectively, in the fair value of the Financing Warrant as a change in the fair value of derivative liabilities within the statement of operations.

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**5. Convertible Note Issuance Costs**

The costs associated with the issuance of the Convertible Notes were recorded as a reduction to the carrying amount of the Convertible Notes and are being amortized as interest expense within the statement of operations over the 14-month life of the notes:

Issuance costs are as follows:

	<b>December 31, 2014</b>	<b>March 31, 2015</b>
Placement fee	\$ 553,490	\$ 553,490
Fair value of Financing warrants at time of issue	212,155	212,155
Attorney fees	79,679	79,679
Escrow fees	3,500	3,500
Beneficial conversion feature	212,155	212,155
Accumulated amortization	(151,568)	(378,921)
Net issuance costs	<u>\$ 909,411</u>	<u>\$ 682,058</u>
Convertible Notes	\$ 6,000,000	\$ 6,000,000
Convertible Notes discount net of amortization	(909,411)	(682,058)
Convertible Notes, net of discount	<u>\$ 5,090,589</u>	<u>\$ 5,317,942</u>

**6. Stockholder Equity**

Authorized capital

Pursuant to the Company's original certificate of incorporation, on June 20, 2014, the Company authorized 5,000 shares of common stock with no par value.

On September 24, 2014, pursuant to an amendment of the Company's certificate of incorporation, the Company increased to 50,000,000 the authorized number of shares of common stock, par value of \$0.001 per share.

The holders of the Company's common stock are entitled to one vote per share. Holders of common stock are entitled to receive a ratable share of dividends, if any, as may be declared by the board of directors.

Common stock issued

On June 20, 2014, the Company issued 1,000 shares of common stock to seven founders of the Company. A total of \$39,837 in expenses incurred prior to incorporation was deemed to be contributed by the founders of the Company.

On September 24, 2014 the Company had a forward stock split whereby each share of issued common stock was converted into 4,800 shares of common stock of the Company.

On June 25, 2015, the Company effected a 1-for-1.10 reverse split of its outstanding shares of common stock, whereby each outstanding share of common stock was converted into 0.91 shares of common stock of the Company. All historical share and per share amounts in periods preceding the stock split have been adjusted to reflect the split retroactively.

Stock based compensation

In 2014, the Board of Directors adopted the Company's stock incentive plan (the "2014 Plan") under which a maximum of 654,546 shares of common stock were authorized for issuance. All authorized shares were available to be issued as of December 31, 2014 and March 31, 2015. The 2014 Plan provides for the following types of stock-based awards: incentive

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**6. Stockholder Equity (cont'd)**

stock options; non-statutory stock options; restricted stock; and performance stock. The 2014 Plan, under which equity incentives may be granted to employees and directors under incentive and non-statutory agreements, requires that the option price may not be less than the fair value of the stock at the date the option is granted. Option awards are exercisable until their expiration, which may not exceed 10 years from the grant date.

**7. Commitments and Contingencies**

Lease commitments

On October 10, 2014, the Company entered into an operating lease for its current Oakland facility through April 2018. The future minimum payments related to this lease are as follows as of December 31, 2014:

	<b>Year ended December 31,</b>
2015	\$ 36,800
2016	38,000
2017	39,200
2018	13,200
Total minimum lease payments	<u>\$ 127,200</u>

From inception to December 31, 2014, the Company has incurred total rent expense related to this lease, including facility fees, of \$42,500.

Legal proceedings

The Company is not subject to any legal proceedings as of December 31, 2014 or March 31, 2015.

**8. Related Party Transactions**

For the period ended December 31, 2014, the Company purchased \$18,750 in shop tools and \$8,195 in shop supplies from AIC Labs, Inc., a wholly owned subsidiary of AIC Nevada, Inc. a holder of more than 5% of issued common shares of the Company.

**9. Income Taxes**

The components of the provision for (benefit from) income tax expense consist of the following for the periods indicated:

	<b>Inception (June 20, 2014) to December 31, 2014</b>	<b>Three Months Ended March 31, 2015</b>
Current		
Federal	\$ —	\$ —
State	800	2,400
Deferred		
Federal	\$ (360,060)	\$ —
State	(61,782)	
Total provision for (benefit from) income taxes	<u>\$ (421,042)</u>	<u>\$ 2,400</u>

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**9. Income Taxes (cont'd)**

The effective tax rate differs from the statutory tax rates for the period from inception (June 20, 2014) to December 31, 2014 as follows:

Tax at federal statutory rate	34.00%
State tax, net of federal benefit	5.81
Nondeductible Expenses	(17.13)
Valuation allowance	(5.70)
Credits	0.89
Other	(2.80)
Effective income tax rate	<u>15.07%</u>

The components of deferred tax assets (liabilities) included on the balance sheet are as follows:

	<b>December 31, 2014</b>
Deferred tax assets	
Consulting Warrants	\$ 284,313
Start-up costs	276,445
Net operating losses	45,562
Credits	26,050
Depreciation	517
Total gross deferred tax assets	<u>635,887</u>
Valuation allowance	(167,618)
Total gross deferred tax assets (net of valuation allowance)	<u>468,269</u>
Deferred tax liabilities	
Patents	(404,266)
Others	(64,003)
Total gross deferred tax liabilities	<u>(468,269)</u>
Net deferred tax assets	<u>\$ —</u>

Based on the available objective evidence at this time, management believes that it is more likely than not that the deferred tax assets will not be utilized, such that a full valuation allowance has been recorded.

The Company has Federal and California net operating loss carry-forwards of approximately \$121,272 and \$125,629, respectively. These amounts were generated in the period from inception to December 31, 2014 and can be carried forward twenty years for federal and California tax purposes. The federal and state carry-forwards expire in 2034.

Utilization of the Company's net operating loss may be subject to substantial annual limitation due to the ownership change limitations provided by the Internal Revenue Code and similar state provisions. Such an annual limitation could result in the expiration of net operating loss carryforwards prior to utilization.

The Company's policy is to account for interest and penalties as income tax expense. As of December 31, 2014, the Company had no interest related to unrecognized tax benefits. No amounts of penalties related to unrecognized tax benefits were recognized in the provision for income taxes.

The Company files income tax returns in the U.S. federal jurisdiction and California state jurisdiction. The Company's tax year for calendar year 2014 is open to examination by the U.S. federal and California state tax authorities.

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**10. Subsequent Events**

On February 25, 2015 the Company entered into a purchase and sale agreement (“Purchase Agreement”) for 12.56 acres in the Tahoe-Reno Industrial Center, located in McCarren, Nevada, for a purchase price of \$1,066,872. The Purchase Agreement was amended on May 19, 2015 for a final purchase of 11.73 acres at a price of \$1,006,370. Escrow on this land purchase closed on May 29, 2015. The Company intends to build its first lead acid battery recycling facility on this site.

On April 1, 2015, the Board of Directors and stockholders of the Company authorized an increase in the number of shares of common stock available for issuance under the 2014 Plan from 654,546 to 1,363,637.

On April 1, 2015, the Board of Directors authorized the issuance of options to purchase a total of 528,182 shares of common stock to seven employees of the Company, of which 25,452 options were subsequently forfeited and canceled due to the employee’s resignation.

The options vest over a three year period and have an exercise price of \$3.56 per share.

On May 1, 2015, the Company issued options to purchase a total of 39,335 shares of common stock to independent members of the Board of Directors. The options vest over a three year period and have an exercise price of \$3.56 per share.

On June 9, 2015, the Company filed a registration statement on form S-1 with the Securities and Exchange Commission. The registration was for the sale of common stock to raise proceeds of \$30,000,000.

On June 12, 2015, the Board of Directors authorized the issuance of options to purchase a total of 17,482 shares of common stock to an independent member of the Board of Directors. The options vest over a three year period and have an exercise price of \$3.56 per share.

On June 25, 2015, the Company effected a 1-for-1.10 reverse split of its outstanding shares of common stock, whereby each outstanding share of common stock was converted into 0.91 shares of common stock of the Company. All historical share and per share amounts in periods preceding the stock split have been adjusted to reflect the split retroactively.

On June 30, 2015, the Company issued options to purchase a total of 25,000 shares of common stock to two employees of the Company. The options vest over a three year period and have an exercise price of \$4.26 per share.

The Company has evaluated subsequent events through June 30, 2015 the date which the financial statements were available to be issued.

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**6,000,000 Shares of Common Stock**

**Aqua Metals, Inc.**

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**PROSPECTUS**

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**National Securities Corporation**

**Northland Capital Markets**

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## PART II

### INFORMATION NOT REQUIRED IN PROSPECTUS

#### ITEM 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following table sets forth the various expenses to be incurred in connection with the sale and distribution of our common stock being registered hereby, all of which will be borne by us (except any underwriting discounts and commissions and expenses incurred for brokerage, accounting, tax or legal services or any other expenses incurred in disposing of the shares). All amounts shown are estimates except the SEC registration fee.

SEC Filing Fee	\$	4,489.97
FINRA Fee	\$	4,364.00
Underwriters' Fees and Expenses.	\$	185,000.00
Nasdaq Fee	\$	50,000.00
Printing Expenses	\$	25,000.00
Accounting Fees and Expenses	\$	75,000.00
Legal Fees and Expenses	\$	175,000.00
Transfer Agent and Registrar Expenses	\$	15,000.00
Miscellaneous	\$	66,146.03
Total	\$	<u>600,000.00</u>

#### ITEM 14. INDEMNIFICATION OF DIRECTORS AND OFFICERS

The following summary is qualified in its entirety by reference to the complete text of any statutes referred to below and the certificate of incorporation of Aqua Metals, Inc., a Delaware corporation.

Section 145 of the General Corporation Law of the State of Delaware (the "DGCL") permits a Delaware corporation to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful.

In the case of an action by or in the right of the corporation, Section 145 of the DGCL permits a Delaware corporation to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation and except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses that the Court of Chancery or such other court shall deem proper.

Section 145 of the DGCL also permits a Delaware corporation to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not the corporation would have the power to indemnify such person against such liability under Section 145 of the DGCL.



Article Sixth of our First Amended and Restated Certificate of Incorporation states that to the fullest extent permitted by the DGCL our directors shall not be personally liable to us or to our stockholders for monetary damages for breach of fiduciary duty as a director. If the DGCL is amended after the date hereof to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of our directors shall be eliminated or limited to the fullest extent permitted by the DGCL, as so amended.

Article Sixth of our First Amended and Restated Certificate of Incorporation authorizes us, to the fullest extent permitted by applicable law, to provide indemnification of (and advancement of expenses to) our directors, officers, employees and agents (and any other persons to which the DGCL permits us to provide indemnification) through bylaw provisions, agreements with such directors, officers, employees, agents or other persons, vote of stockholders or disinterested directors or otherwise, subject only to limits created by the DGCL with respect to actions for breach of duty to our corporation, our stockholders and others.

Article X of our Bylaws provides that we shall, to the maximum extent and in the manner permitted by the DGCL, indemnify each of our directors against expenses (including attorneys' fees), judgments, fines, settlements and other amounts actually and reasonably incurred in connection with any proceeding, arising by reason of the fact that such person is or was a director of the Company. Article X of our Bylaws also provides that we may, to the maximum extent and in the manner permitted by the DGCL, indemnify each of our employees, officers and agents against expenses (including attorneys' fees), judgments, fines, settlements and other amounts actually and reasonably incurred in connection with any proceeding, arising by reason of the fact that such person is or was an employee, officer or agent of the Company. The right to indemnification conferred by Article X includes the right to be paid by us the expenses incurred in defending any action or proceeding for which indemnification is required or permitted following authorization thereof by the board of directors shall be paid in advance of the final disposition of such action or proceeding upon receipt of an undertaking by or on behalf of the indemnified party to repay such amount if it shall ultimately be determined by final judicial decision from which there is no further right to appeal that the indemnified party is not entitled to be indemnified as authorized in Article X. We may maintain insurance, at our expense, to protect the Company and any of our directors, officers, employees or agents against any such expense, liability or loss, whether or not we have the power to indemnify such person.

As permitted by the DGCL, we have entered into indemnification agreements with each of our directors and executive officers that require us to indemnify such persons against various actions including, but not limited to, third-party actions where such director or executive officer, by reason of his or her corporate status, is a party or is threatened to be made a party to an action, or by reason of anything done or not done by such director in any such capacity. We intend to indemnify directors and executive officers against all costs, judgments, penalties, fines, liabilities, amounts paid in settlement by or on behalf such directors or executive officers and for any expenses actually and reasonably incurred by such directors or executive officers in connection with such action, if such directors or executive officers acted in good faith and in a manner they reasonably believed to be in or not opposed to the best interests of the Company, and with respect to any criminal proceeding, had no reasonable cause to believe their conduct was unlawful. We also intend to advance to our directors and executive officers expenses (including attorney's fees) incurred by such directors and executive officers in advance of the final disposition of any action after the receipt by the Company of a statement or statements from directors or executive officers requesting such payment or payments from time to time, provided that such statement or statements are accompanied by an undertaking, by or on behalf of such directors or executive officers, to repay such amount if it shall ultimately be determined that they are not entitled to be indemnified against such expenses by the Company.

The indemnification agreements also set forth certain procedures that will apply in the event of a claim for indemnification or advancement of expenses, including, among others, provisions about providing notice to the Company of any action in connection with which a director or executive officer seeks indemnification or advancement of expenses from the Company and provisions concerning the determination of entitlement to indemnification or advancement of expenses.

Prior to the closing of this offering we plan to enter into an underwriting agreement, which will provide that the underwriters are obligated, under some circumstances, to indemnify our directors, officers and controlling persons against specified liabilities.

#### **ITEM 15. RECENT SALES OF UNREGISTERED SECURITIES**

Since the inception of our corporation, we issued the following securities without registration under the Securities Act of 1933, as amended.

In June 2014, we sold 4,363,641 shares of common stock to our seven founding shareholders in consideration of their contribution of \$39,837 of cash and a patent application and related intellectual property valued at \$1,059,000. The issuance was exempt pursuant to Section 4(a)(2) of the Securities Act.

In August 2014, we issued to Wirtz Manufacturing Co. Inc. a convertible promissory note in the original principal amount of \$500,000. The issuance was exempt pursuant to Section 4(a)(2) of the Securities Act.

On September 8, 2014, we issued to Liquid Patent Consulting, LLC warrants to purchase 436,365 shares of our common stock at an exercise price of \$0.003 per share over a five-year term. The issuance was exempt pursuant to Section 4(a)(2) of the Securities Act.

On October 31, 2014, we consummated an offering of \$6.0 million in principal amount of our senior secured convertible promissory notes for the cash consideration of \$5.5 million and exchange of a previously issued \$500,000 promissory note. Interest accrues on the unpaid principal amount under the convertible notes at the rate of six percent (6%) per year, except during any event of default under the convertible notes in which case the interest rate shall be twelve percent (12%) per year. All principal and interest under the convertible notes are due and payable on December 31, 2015. Pursuant to the terms of our investment agreement with Wirtz Manufacturing Co. Inc., Wirtz exchanged its aforementioned convertible promissory note investment in our company for a senior secured convertible promissory notes sold in the October 2014 private placement. All principal and interest under the senior secured convertible promissory notes are convertible into shares of common stock. The notes were issued pursuant to Section 4(a)(2) of the Securities Act and Rule 506 thereunder. All of the investors were accredited investors as such term is defined in Rule 501 under the Securities Act.

National Securities Corporation acted as placement agent in connection with the October 2014 placement. We paid National Securities Corporation a 10% selling commission on all convertible notes sold. We also issued to National Securities a warrant to purchase shares of our common stock equal to 10% of our common shares issuable upon conversion of the notes sold in the placement. The warrant issuance was exempt pursuant to Section 4(a)(2) of the Securities Act.

We believe the offers, sales and issuances of the above securities by us were exempt from registration under the Securities Act by virtue of Section 4(a)(2) of the Securities Act as transactions not involving a public offering. The recipients of the securities in each of these transactions represented their intentions to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were placed upon the stock certificates, notes and warrants issued in these transactions. All recipients had adequate access, through their relationships with us, to information about our Company. The sales of these securities were made without any general solicitation or advertising.

## ITEM 16. EXHIBITS

<b>Exhibit No.</b>	<b>Description of Document</b>
1.1	Form of Underwriting Agreement
3.1**	First Amended and Restated Certificate of Incorporation of the Registrant
3.2**	Amended and Restated Bylaws of the Registrant
3.3**	Certificate of Amendment to First Amended and Restated Certificate of Incorporation of the Registrant
4.1	Specimen Certificate representing shares of common stock of Registrant
4.2**	Warrant dated September 8, 2014 issued to Liquid Patent Consulting, LLC
4.3**	Form of Senior Secured Convertible Promissory Note issued by the Registrant to investors in the offering completed on October 31, 2014
4.4**	Warrant dated October 31, 2014 issued to National Securities Corporation
4.5	Form of Underwriters' Warrant
5.1	Opinion of Greenberg Traurig, LLP regarding the validity of the common stock being registered
10.1+**	Form of Indemnification Agreement entered into by the Registrant with its Officers and Directors
10.2+**	Aqua Metals, Inc. 2014 Stock Incentive Plan
10.3**	Engagement Agreement dated September 8, 2014 between Liquid Patent Consulting, LLC and the Registrant
10.4**	Securities Purchase Agreement dated October 31, 2014 between the Purchasers of Senior Secured Convertible Promissory Notes and the Registrant
10.5**	Registration Rights Agreement dated October 31, 2014 between the Purchasers of Senior Secured Convertible Promissory Notes and the Registrant
10.6**	Security Agreement dated October 31, 2014 between the Purchasers of Senior Secured Convertible Promissory Notes and the Registrant
10.7**	Real Estate Purchase and Sale Agreement dated February 23, 2015 between Tahoe-Reno Industrial Center, LLC and the Registrant

<b>Exhibit No.</b>	<b>Description of Document</b>
10.8+**	Executive Employment Agreement dated January 15, 2015 between Stephen R. Clarke and the Registrant
10.9+**	Executive Employment Agreement dated January 15, 2015 between Thomas Murphy and the Registrant
10.10+**	Executive Employment Agreement dated January 1, 2015 between Selwyn Mould and the Registrant
10.11+**	Executive Employment Agreement dated January 15, 2015 between Stephen D. Cotton and the Registrant
10.12**	Form of Lock-Up Agreement
10.13**	Third Amendment to Purchase and Sale Agreement dated May 19, 2015 between Tahoe-Reno Industrial Center, LLC and the Registrant
21.1**	List of Subsidiaries
23.1	Consent of Armanino LLP, Independent Registered Public Accounting Firm
23.2	Consent of Greenberg Traurig, LLP (included in Exhibit 5.1)
24.1**	Power of Attorney (included on page II-4)

\* To be filed by amendment

\*\* Previously filed

+ Indicates management compensatory plan, contract or arrangement

## **ITEM 17. UNDERTAKINGS**

The undersigned registrant hereby undertake to provide to the underwriters at the closing specified in the underwriting agreements, certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned registrant undertakes that:

- (1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus as filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
- (2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this Amendment No. 2 to Registration Statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Oakland, California on this 20<sup>th</sup> day of July 2015.

<b>AQUA METALS, INC.</b>  <u>/s/ Stephen R. Clarke</u> Stephen R. Clarke Chief Executive Officer and Director (Principal Executive Officer)
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## POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Stephen R. Clarke and Thomas Murphy and each of them, his true and lawful attorney-in-fact and agent, each with full power of substitution and resubstitution, severally, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement on Form S-1, any subsequent registration statements pursuant to Rule 462 of the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them or their or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof. This power of attorney may be executed in counterparts.

Pursuant to the requirements of the Securities Act of 1933, this Amendment No. 2 to Registration Statement on Form S-1 has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Stephen R. Clarke Stephen R. Clarke	Chief Executive Officer and Director <i>(Principal Executive Officer)</i>	July 20, 2015
/s/ Thomas Murphy Thomas Murphy	Chief Financial Officer and Director <i>(Principal Financial and Accounting Officer)</i>	July 20, 2015
* Stan Kimmel	Director	July 20, 2015
* Vincent L. DiVito	Director	July 20, 2015
* Mark Slade	Director	July 20, 2015

*By: <u>/s/ Stephen R. Clarke</u> Attorney-in-fact
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## AQUA METALS, INC.

## UNDERWRITING AGREEMENT

New York, New York  
\_\_\_\_\_, 2015National Securities Corporation  
410 Park Avenue, 14th Floor  
New York, NY 10022

Ladies and Gentlemen:

The undersigned, Aqua Metals, Inc., a company formed under the laws of the Delaware (“**Company**”), hereby confirms its agreement with National Securities Corporation (hereinafter referred to as “**you**” (including its correlatives) or the “**Representative**”) and with the other underwriters named on Schedule 1 hereto for which the Representative is acting as representative (the Representative and such other underwriters being collectively called the “**Underwriters**” or, individually, an “**Underwriter**”) as follows:

1. Purchase and Sale of Securities.1.1. Firm Securities.1.1.1. Nature and Purchase of Firm Securities.

(i) On the basis of the representations and warranties herein contained, but subject to the terms and conditions herein set forth, the Company agrees to issue and sell, severally and not jointly, to the several Underwriters, an aggregate of [●] shares (“**Firm Shares**”) of the Company’s common stock, par value \$0.001 per share (the “**Common Stock**”).

(ii) The Underwriters, severally and not jointly, agree to purchase from the Company the number of Firm Shares set forth opposite their respective names on Schedule 1 attached hereto and made a part hereof at a purchase price (net of discounts and commissions) of \$\_\_\_\_ per Share [92% of the per Share offering price]. The Firm Shares are to be offered initially to the public (the “**Offering**”) at the offering price set forth on the cover page of the Prospectus (as defined in Section 2.1.1 hereof).

1.1.2. Shares Payment and Delivery.

(i) Delivery and payment for the Firm Shares shall be made at 10:00 a.m., Eastern time, on the third (3<sup>rd</sup>) Business Day following the effective date (the “**Effective Date**”) of the Registration Statement (as defined in Section 2.1.1 below) (or the fourth (4<sup>th</sup>) Business Day following the Effective Date, if the Registration Statement is declared effective after 4:30 p.m.) or at such earlier time as shall be agreed upon in writing by the Representative and the Company at the offices of Golenbock Eiseman Assor Bell & Peskoe LLP, counsel to the Underwriters (“**GEAB&P**”), or at such other place (or remotely by facsimile or other electronic transmission) as shall be agreed upon in writing by the Representative and the Company. The hour and date of delivery and payment for the Firm Shares is called the “**Closing Date**.”

(ii) Payment for the Firm Shares shall be made on the Closing Date by wire transfer in Federal (same day) funds, payable to the order of the Company upon delivery of the certificates (in form and substance satisfactory to the Underwriters) representing the Firm Shares (or through the facilities of the Depository Trust Company (the “**DTC**”) for the account of the Underwriters. The Firm Shares shall be registered in such name or names and in such authorized denominations as the Representative may request in writing at least two (2) full Business Days prior to the Closing Date. The Company shall not be obligated to sell or deliver the Firm Shares except upon tender of payment by the Representative for all the Firm Shares. The term “**Business Day**” means any day other than a Saturday, a Sunday or a legal holiday or a day on which banking institutions are authorized or obligated by law to close in New York City.

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## 1.2. Over-allotment Option.

1.2.1. Option Shares. For the purposes of covering any over-allotments in connection with the distribution and sale of the Firm Shares, the Underwriters are hereby granted, an option to purchase up to [●] shares of Common Stock representing fifteen (15%) percent of the Firm Shares sold in the offering from the Company (the “**Over-allotment Option**”). Such additional Over-allotment Option shares of Common Stock, the net proceeds of which will be deposited with the Company’s account, are hereinafter referred to as “**Option Shares.**” The purchase price to be paid for the Option Shares will be the same price per Option Share as the price per Firm Shares set forth in Section 1.1.1 hereof. The Firm Shares and the Option Shares are hereinafter referred to collectively as the “**Public Securities.**”

1.2.2. Exercise of Option. The Over-allotment Option granted pursuant to Section 1.2.1 hereof may be exercised by the Representative as to all (at any time) or any part (from time to time) of the Option Shares within 45 days after the Effective Date. The Underwriters will not be under any obligation to purchase any Option Shares prior to the exercise of the Over-allotment Option. The Over-allotment Option granted hereby may be exercised by the giving of oral notice to the Company from the Representative, which must be confirmed in writing by overnight mail or facsimile or other electronic transmission setting forth the number of Option Shares to be purchased and the date and time for delivery of and payment for the Option Shares (the “**Option Closing Date**”), which will not be later than five (5) full Business Days after the date of the notice or such other time as shall be agreed upon in writing by the Company and the Representative, at the offices of GEAB&P or at such other place (including remotely by facsimile or other electronic transmission) as shall be agreed upon in writing by the Company and the Representative. If such delivery and payment for the Option Shares does not occur on the Closing Date, the Option Closing Date will be as set forth in the notice. Upon exercise of the Over-allotment Option, the Company will become obligated to convey to the Underwriters, and, subject to the terms and conditions set forth herein, the Underwriters will become obligated to purchase, the number of Option Shares specified in such notice.

1.2.3. Payment and Delivery. Payment for the Option Shares will be made on the Option Closing Date by wire transfer in Federal (same day) funds as follows: \$[\_\_\_\_\_] per Option Share, [92% of the per Option Share offering price], payable to the order of the Company upon delivery of certificates (in form and substance satisfactory to the Underwriters) representing the Option Shares (or through the facilities of DTC) for the account of the Underwriters. The Option Shares shall be registered in such name or names and in such authorized denominations as the Representative may request in writing at least two (2) full Business Days prior to the Option Closing Date. The Company shall not be obligated to sell or deliver the Option Shares except upon tender of payment by the Representative for applicable Option Shares.

1.3. Underwriters’ Warrants. The Company hereby agrees to issue and sell to each Underwriter on the Closing Date and Option Closing Date warrants to purchase that number of shares of Common Stock equal to an aggregate of 10% of the amount of Firm Shares and Options Shares, respectively, sold in the Offering (the “**Underwriters’ Warrants**”). The Underwriters’ Warrants as evidenced by the Underwriters’ Warrant Agreement, in the form attached hereto as Exhibit A, shall be exercisable, in whole or in part, commencing three hundred sixty (360) days after the Effective Date and expiring five (5) years after the Effective Date at an initial exercise price per share of \$[\_\_\_] [120% of the per Share offering price]. The Underwriters’ Warrants and the shares of Common Stock issuable upon exercise thereof (“**Warrant Shares**”) are sometimes referred to herein collectively as the “**Warrant Securities.**” The Underwriter understands and agrees that there are significant restrictions pursuant to FINRA Rule 5110 against transferring the Warrant Securities and by its acceptance thereof shall agree that it will not, sell, transfer, assign, pledge or hypothecate the Warrant Securities, or any portion thereof, or be the subject of any hedging, short sale, derivative, put or call transaction that would result in the effective economic disposition of such securities other than in accordance with FINRA Rule 5110.

2. Representations and Warranties of the Company. The Company for itself and its subsidiaries represents and warrants to the Underwriters as of the Applicable Time (as defined below) and as of the Closing Date and as of the Option Closing Date, if any, as follows:

2.1. Filing of Registration Statement.

2.1.1. Pursuant to the Act. The Company has filed with the Securities and Exchange Commission (the “**Commission**”) a registration statement and an amendment or amendments thereto, on Form S-1 (File No. 333-204826), including any related preliminary prospectus or prospectuses, including those that omitted information pursuant to Rule 430A for the registration of the Public Securities under the Securities Act of 1933, as amended (the “**Act**”), which registration statement and amendment or amendments have been prepared by the Company in all material respects in conformity with the requirements of the Act and the rules and regulations of the Commission under the Act (the “**Regulations**”). Except as the context may otherwise require, such registration statement on file with the Commission at the time the registration statement becomes effective (including the prospectus, financial statements, schedules, exhibits and all other documents filed as a part thereof or incorporated therein by reference pursuant to Item 12 of Form S-1 and all information deemed to be a part thereof as of the Effective Date pursuant to paragraph (b) of Rule 430A of the Regulations and any registration statement filed pursuant to Rule 462(b)), is referred to herein as the “**Registration Statement**.” As used herein, the term “**Preliminary Prospectus**” shall mean the preliminary prospectus dated June 25, 2015 made part of the Registration Statement along with the Company’s issuer free writing prospectuses filed with the Commission on June 29, 2015 and July 6, 2015. The final prospectus in the form first furnished to the Underwriters for use in the Offering, is hereinafter called the “**Prospectus**.” The Registration Statement has been declared effective by the Commission on the date hereof. “**Applicable Time**” means 5:00 pm on \_\_\_\_\_, 2015 on the Effective Date or such other time as agreed to in writing by the Company and the Representative.

2.1.2. Pursuant to the Exchange Act. The Company has filed with the Commission a Form 8-A (File Number \_\_\_\_\_) providing for the registration under the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”), of the Firm Shares, and the Option Shares. The registration of the Firm Shares and the Option Shares under the Exchange Act has been declared effective by the Commission on the date hereof.

2.2. No Stop Orders, etc. To the Company’s knowledge, neither the Commission nor any state regulatory authority has issued any order preventing or suspending the use of the Prospectus or the Registration Statement or has instituted or threatened to institute any proceedings with respect to such an order.

2.3. Disclosures in Registration Statement.

2.3.1. 10b-5 Representation. At the respective times of use of the Preliminary Prospectus and Prospectus and the effectiveness of the Registration Statement and any post-effective amendments thereto (and at the Closing Date and the Option Closing Date, if any):

(i) The Preliminary Prospectus, Prospectus, Registration Statement and any post-effective amendments thereto did and will contain all material statements that are required to be stated therein in accordance with the Act and the Regulations, and will in all material respects conform to the requirements of the Act and the Regulations;

(ii) Neither the Preliminary Prospectus, the Prospectus nor the Registration Statement, nor any amendment or supplement thereto, on such dates, do or will contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading. The representation and warranty made in this Section 2.3.1(ii) does not apply to statements made or statements omitted in reliance upon and in conformity with written information furnished to the Company with respect to the Underwriters by the Representative expressly for use in the Preliminary Prospectus, the Prospectus or the Registration Statement or any amendment thereof or supplement thereto. The parties acknowledge and agree that such information provided by or on behalf of any Underwriter consists solely of the names of the Underwriters appearing in the “Underwriting” section of the Prospectus and the following additional disclosure contained in the “Underwriting” section of the Prospectus: (i) the fourth and sixth paragraphs under “Underwriting,” (ii) the statements in “Underwriting - Determination of Offering Price,” and (iii) the first paragraph under “Underwriting - Short Positions and Penalty Bids.” (the “**Underwriters’ Information**”).

2.3.2. Disclosure of Agreements. The agreements and documents described in the Preliminary Prospectus, the Prospectus and the Registration Statement conform to the descriptions thereof contained therein and there are no agreements or other documents required by the Act and the Regulations to be described therein or to be filed with the Commission as exhibits to the Registration Statement, that have not been so described or filed. Each agreement or other instrument (however characterized or described) to which the Company is a party or by which it is or may be bound or affected and (i) that is referred to in the Preliminary Prospectus or the Prospectus, or (ii) is material to the Company’s business, has been duly authorized and validly executed by the Company, is in full force and effect in all material respects and is enforceable against the Company and, to the Company’s knowledge, the other parties thereto, in accordance with its terms, except (x) as such enforceability may be limited by bankruptcy, insolvency, reorganization or similar laws affecting creditors’ rights generally, (y) as enforceability of any indemnification or contribution provision may be limited under the federal or state securities laws, and (z) that the remedy of specific performance and injunctive and other forms of equitable relief may be subject to the equitable defenses and to the discretion of the court before which any proceeding therefore may be brought. None of such agreements or instruments has been assigned by the Company, and neither the Company nor, to the Company’s knowledge, any other party is in default thereunder and, to the Company’s knowledge, no event has occurred that, with the lapse of time or the giving of notice, or both, would constitute a default thereunder. To the Company’s knowledge, performance by the Company of the material provisions of such agreements or instruments will not result in a violation of any existing applicable law, rule, regulation, judgment, order or decree of any governmental agency or court, domestic or foreign, having jurisdiction over the Company or any of its assets or businesses, including, without limitation, those relating to environmental laws and regulations.

2.3.3. Prior Securities Transactions. No securities of the Company that are required to be “integrated” pursuant to the Act or the regulations thereunder with the offer and sale of the shares of Common Stock pursuant to the Registration Statement have been offered or sold, either prior to the initial filing of the Registration Statement or the Effective Date, by the Company or, to the Company’s knowledge, any of its affiliates or by or on behalf of, or for the benefit of, any person or persons controlling, controlled by, or under common control with the Company, except as disclosed in the Registration Statement.

#### 2.4. Changes After Dates in Registration Statement.

2.4.1. No Material Adverse Change. Since the respective dates as of which information is given in the Registration Statement and the Prospectus, except as otherwise specifically stated therein: (i) there has been no material adverse change in the condition, financial or otherwise, of the Company taken as a whole; (ii) there have been no material transactions entered into by the Company required to be disclosed in the Prospectus or the Registration Statement, other than as contemplated pursuant to this Agreement; and (iii) no officer or director of the Company has resigned from any position with the Company.



2.4.2. Recent Securities Transactions, etc. Subsequent to the respective dates as of which information is given in the Registration Statement and the Prospectus, and except as may otherwise be indicated or contemplated herein or disclosed in the Registration Statement and the Prospectus, the Company has not: (i) issued any securities or incurred any liability or obligation, direct or contingent, for borrowed money; or (ii) declared or paid any dividend or made any other distribution on or in respect to its capital stock.

2.5. Independent Accountants. To the knowledge of the Company, Armanino LLP (“**Armanino**”), whose report is filed with the Commission as part of the Registration Statement, are independent registered public accountants as required by the Act and the Regulations. Armanino has not, during the periods covered by the financial statements included in the Prospectus, provided to the Company any non-audit services, as such term is used in Section 10A(g) of the Exchange Act.

2.6. Financial Statements. The financial statements, including the notes thereto and supporting schedules, if any, included in the Preliminary Prospectus, the Prospectus and the Registration Statement fairly present the financial position and the results of operations of the Company at the dates and for the periods to which they apply; and such financial statements have been prepared in conformity with generally accepted accounting principles (“**GAAP**”), consistently applied throughout the periods involved; and the supporting schedules included in the Registration Statement, if any, present fairly the information required to be stated therein. The Preliminary Prospectus, the Prospectus and the Registration Statement discloses all material off-balance sheet transactions, arrangements, obligations (including contingent obligations), and other relationships of the Company with unconsolidated entities or other persons required to be disclosed under Item 303(a)(4) of Regulation S-K.

2.7. Authorized Capital; Options, etc. The Company had, at the date or dates indicated in the Preliminary Prospectus, the Prospectus and the Registration Statement, the duly authorized, issued and outstanding capitalization as set forth therein. Based on the assumptions stated in the Preliminary Prospectus, the Prospectus and the Registration Statement, the Company will have on the Closing Date the adjusted stock capitalization set forth therein (as such adjusted stock capitalization may be further adjusted for the final determination of the shares of Common Stock to be issued upon conversion of the Company’s Senior Secured Convertible Notes (“**Convertible Notes**”). Except as set forth in, or contemplated by, the Registration Statement and the Prospectus, on the Effective Date and on the Closing Date, there will be no options, warrants, or other rights to purchase or otherwise acquire any authorized, but unissued shares of Common Stock of the Company or any security convertible into shares of Common Stock of the Company, or any contracts or commitments on the part of the Company to issue or sell shares of Common Stock or any such options, warrants, rights or convertible securities.

2.8. Valid Issuance of Securities, etc.

2.8.1. Outstanding Securities. All issued and outstanding securities of the Company issued prior to the transactions contemplated by this Agreement have been duly authorized and validly issued and are fully paid and non-assessable; the holders thereof have no rights of rescission with respect thereto, and are not subject to personal liability by reason of being such holders; and none of such securities were issued in violation of the preemptive rights of any holders of any security of the Company or similar contractual rights granted by the Company. The authorized Common Stock of the Company conforms in all material respects to all statements relating thereto contained in the Preliminary Prospectus, the Prospectus and the Registration Statement. The offers and sales of the outstanding shares of Common Stock were at all relevant times either registered under the Act and the applicable state securities or Blue Sky laws or, based in part on the representations and warranties of the purchasers of such shares of Common Stock, exempt from such registration requirements.

2.8.2. Securities Sold Pursuant to this Agreement. The Public Securities have been duly authorized for issuance and sale and, when issued and paid for, will be validly issued, fully paid and non-assessable; the holders thereof are not and will not be subject to personal liability by reason of being such holders; the Public Securities are not and will not be subject to the preemptive rights of any holders of any security of the Company or similar contractual rights granted by the Company; and all corporate action required to be taken for the authorization, issuance and sale of the Public Securities has been duly and validly taken. The Public Securities conform in all material respects to all statements with respect thereto contained in the Preliminary Prospectus, the Prospectus and the Registration Statement. The Warrant Shares issuable upon exercise of the Underwriters' Warrants have been reserved for issuance upon the exercise thereof and, when issued in accordance with the terms of such securities will be validly issued, fully paid and non-assessable; the holders thereof are not and will not be subject to personal liability by reason of being such holders; and all corporate action required to be taken for the authorization, issuance and sale of the Warrant Securities has been duly and validly taken. The Warrant Securities conform in all material respects to all statements with respect thereto contained in the Registration Statement.

2.9. Registration Rights of Third Parties. Except as set forth in the Preliminary Prospectus, the Prospectus and the Registration Statement, no holders of any securities of the Company or any rights exercisable for or convertible or exchangeable into securities of the Company have the right to require the Company to register any such securities of the Company under the Act or to include any such securities in a registration statement to be filed by the Company.

2.10. Validity and Binding Effect of Agreements. This Agreement has been duly and validly authorized by the Company, and, when executed and delivered, will constitute, the valid and binding agreements of the Company, enforceable against the Company in accordance with their respective terms, except: (i) as such enforceability may be limited by bankruptcy, insolvency, reorganization or similar laws affecting creditors' rights generally; (ii) as enforceability of any indemnification or contribution provision may be limited under the federal or state securities laws; and (iii) that the remedy of specific performance and injunctive and other forms of equitable relief may be subject to the equitable defenses and to the discretion of the court before which any proceeding therefore may be brought.

2.11. No Conflicts, etc. The execution, delivery, and performance by the Company of this Agreement and all ancillary documents, the consummation by the Company of the transactions herein and therein contemplated and the compliance by the Company with the terms hereof and thereof do not and will not, with or without the giving of notice or the lapse of time or both: (i) result in a material breach of, or conflict with any of the terms and provisions of, or constitute a material default under, or result in the creation, modification, termination or imposition of any lien, charge or encumbrance upon any property or assets of the Company pursuant to the terms of any agreement or instrument to which the Company is a party; (ii) result in any violation of the provisions of the Certificate of Incorporation of the Company (as the same may be amended from time to time, the "**Certificate of Incorporation**"); or (iii) result in the Company's violation of any existing applicable law, rule, regulation, judgment, order or decree of any governmental agency or court, domestic or foreign, having jurisdiction over the Company or any of its properties or business constituted as of the date hereof.

2.12. No Defaults; Violations. No material default exists in the due performance and observance of any term, covenant or condition of any material license, contract, indenture, mortgage, deed of trust, note, loan or credit agreement, or any other agreement or instrument evidencing an obligation for borrowed money, or any other material agreement or instrument to which the Company is a party or by which the Company may be bound or to which any of the properties or assets of the Company is subject. The Company is not in violation of any term or provision of its Certificate of Incorporation, or in violation of any franchise, license, permit, applicable law, rule, regulation, judgment or decree of any governmental agency or court, domestic or foreign, having jurisdiction over the Company or any of its properties or businesses.

### 2.13. Corporate Power; Licenses; Consents.

2.13.1. Conduct of Business. Except as described in the Preliminary Prospectus, the Prospectus and the Registration Statement, the Company has all requisite corporate power and authority, and has all necessary authorizations, approvals, orders, licenses, certificates and permits of and from all governmental regulatory officials and bodies that it needs as of the date hereof to conduct its business purpose as described in the Preliminary Prospectus and the Prospectus. The disclosures in the Preliminary Prospectus, the Prospectus and the Registration Statement concerning the effects of Federal, state, local and foreign regulation on this Offering and the Company's business purpose as currently contemplated are correct in all material respects.

2.13.2. Transactions Contemplated Herein. The Company has all corporate power and authority to enter into this Agreement and to carry out the provisions and conditions hereof, and all consents, authorizations, approvals and orders required in connection therewith have been obtained. No consent, authorization or order of, and no filing with, any court, government agency or other body is required for the valid issuance, sale and delivery of the securities and the consummation of the transactions and agreements contemplated by this Agreement and as contemplated by the disclosures in the Preliminary Prospectus and the Prospectus, except with respect to applicable Federal and state securities laws and regulations and the rules and regulations of the Financial Industry Regulatory Authority, Inc. ("**FINRA**").

2.14. D&O Questionnaires. To the Company's knowledge, all information contained in the questionnaires (the "**Questionnaires**") completed by each of the Company's officers and directors immediately prior to the Offering, as well as in the Lock-Up Agreement provided to the Underwriters, is true and correct in all material respects and the Company has not become aware of any information which would cause the information disclosed in the Questionnaires completed by each such officer or director to become inaccurate and incorrect. To the extent that information in the Preliminary Prospectus, the Prospectus or the Registration Statement differs from the information provided in a Questionnaire, the information in the Preliminary Prospectus, the Prospectus and the Registration Statement will be deemed to supersede and replace the information in such Questionnaire.

2.15. Litigation; Governmental Proceedings. There is no action, suit, proceeding, inquiry, arbitration, investigation, litigation or governmental proceeding pending or, to the Company's knowledge, threatened against, or involving the Company or, to the Company's knowledge, any executive officer or director that is required to be disclosed in the Preliminary Prospectus, the Prospectus and the Registration Statement which has not been disclosed therein or in connection with the Company's listing application for the listing of the shares of Common Stock on the Nasdaq Capital Market.

2.16. Good Standing. The Company has been duly organized and is validly existing as a corporation and is in good standing under the laws of the Delaware as of the date hereof, and is duly qualified to do business and is in good standing in each jurisdiction in which its ownership or lease of property or the conduct of business requires such qualification, except where the failure to qualify would not have a Material Adverse Effect (as defined in Section 2.21).

2.17. Stop Orders. To the Company's knowledge, the Commission has not issued any order preventing or suspending the use of the Preliminary Prospectus or Prospectus or any part thereof.

### 2.18. Transactions Affecting Disclosure to FINRA.

2.18.1. Finder's Fees. Except as described in the Preliminary Prospectus, the Prospectus and the Registration Statement, there are no claims, payments, arrangements, agreements or understandings relating to the payment of a finder's, consulting or origination fee by the Company or any of its officers or directors with respect to the sale of the securities hereunder or any other arrangements, agreements or understandings of the Company or, to the Company's knowledge, any of its shareholders that may affect the Underwriters' compensation, as determined by FINRA.

2.18.2. Payments Within Twelve Months. Except as described in the Preliminary Prospectus, the Prospectus and the Registration Statement, the Company has not made any direct or indirect payments (in cash, securities or otherwise) to: (i) any person, as a finder's fee, consulting fee or otherwise, in consideration of such person raising capital for the Company or introducing to the Company persons who raised or provided capital to the Company; (ii) to any FINRA member; or (iii) to the Company's knowledge, to any person or entity that has any direct or indirect affiliation or association with any FINRA member, within the twelve months prior to the Effective Date, other than payments to the Underwriters as provided hereunder in connection with the Offering.

2.18.3. Use of Proceeds. None of the net proceeds of the Offering will be paid by the Company to any participating FINRA member or its affiliates, except as specifically authorized herein.

2.18.4. FINRA Affiliation. To the Company's knowledge, no officer, director or any beneficial owner of the Company's unregistered securities (other than the record or beneficial holders of the Convertible Notes) has any direct or indirect affiliation or association with any FINRA member (as determined in accordance with the rules and regulations of FINRA) except as set forth in the Registration Statement. The Company will advise the Representative if it learns that any officer, director or owner of at least 5% of the Company's outstanding shares of Common Stock (or securities convertible into shares of Common Stock) is or becomes within 40 days of the Effective Date an affiliate or associated person of a FINRA member participating in the Offering.

2.19. Foreign Corrupt Practices Act. Neither the Company nor any of the directors, employees or officers of the Company or, to its knowledge, any other person acting on behalf of the Company has, directly or indirectly, given or agreed to give any money, gift or similar benefit (other than legal price concessions to customers in the ordinary course of business) to any customer, supplier, employee or agent of a customer or supplier, or official or employee of any governmental agency or instrumentality of any government (domestic or foreign) or any political party or candidate for office (domestic or foreign) or any political party or candidate for office (domestic or foreign) or other person who was, is, or may be in a position to help or hinder the business of the Company (or assist it in connection with any actual or proposed transaction) that (i) might subject the Company to any damage or penalty in any civil, criminal or governmental litigation or proceeding, (ii) if not given in the past, might have had a Material Adverse Effect as reflected in any of the financial statements contained in the Preliminary Prospectus, the Prospectus or (iii) if not continued in the future, might have a Material Adversely Effect. The Company has taken reasonable steps to ensure that its accounting controls and procedures are sufficient to cause the Company to comply in all material respects with the Foreign Corrupt Practices Act of 1977, as amended.

2.20. Officers' Certificate. Any certificate pursuant to this Agreement signed by any duly authorized officer of the Company and delivered to the Representative shall be deemed a representation and warranty by the Company to the Underwriters as to the matters covered thereby.

2.21. Possession of Licenses and Permits. The Company and each subsidiary (A) possesses the licenses, permits, certificates, authorizations, consents and approvals (collectively, "**Governmental Licenses**") issued by the appropriate governmental entities necessary to conduct its business as currently conducted as described in the Preliminary Prospectus, the Prospectus and the Registration Statement, and (B) has obtained all necessary Governmental Licenses from other persons necessary to conduct its business, except, in each case of clauses (A) and (B), (i) as described in the Preliminary Prospectus, the Prospectus and the Registration Statement or (ii) to the extent that any failure to possess any Governmental Licenses, provide any notice, make any filing, or obtain any Governmental Licenses would not, individually or in the aggregate, reasonably be expected to have a material adverse effect on the assets, business or operations of the Company or its subsidiaries taken as a whole ("**Material Adverse Effect**"); none of the Company and subsidiaries is in violation of, or in default under, any Governmental License, as except as would not reasonably be expected to have a Material Adverse Effect. All of the Governmental Licenses are valid and in full force and effect, except when the invalidity of such Governmental Licenses or the failure of such Governmental Licenses to be in full force and effect would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. Neither the Company nor the Subsidiary has received any notice of proceedings relating to the revocation or modification of any Governmental Licenses which, individually or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would have a Material Adverse Effect.

2.22. Title to Property. The Company and its subsidiaries have legal and valid title to all assets and properties described as owned by it in the Preliminary Prospectus, the Prospectus and the Registration Statement (whether through fee ownership, mineral estates or similar rights of ownership), in each case free and clear of all liens, except for a first priority lien on all of the assets of the Company securing the Company's obligations under the Convertible Notes or as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect, and any real property or personal property held under lease by the Company or a subsidiary, as applicable, is held under a lease that is valid, existing and enforceable by the Company or the subsidiary, as applicable, with such exceptions as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect, and neither the Company nor any subsidiary has received any written notice of any material claim that is adverse to the rights of the Company or a subsidiary under any the lease.

2.23. Possession of Intellectual Property. The Company owns or possesses all licenses or other rights to use all patents, trademarks, service marks, trade names, copyrights, software and design licenses, trade secrets, manufacturing processes, other intangible property rights and know-how as are necessary for the conduct of its business as described in the Preliminary Prospectus, the Prospectus and the Registration Statement (collectively, "**Intellectual Property**"), except where the failure to own or possess such Intellectual Property would not reasonably be expected to have a Material Adverse Effect. The Company has not received written notice of any infringement of or conflict with (and the Company does not know of any such infringement of or conflict with) asserted rights of others with respect to any Intellectual Property that would reasonably be expected to have a Material Adverse Effect.

2.24. Company IT Systems. The Company owns or has a valid right to access and use all computer systems, networks, hardware, software, databases, websites and equipment used to process, store, maintain and operate data, information and functions necessary for the conduct of its business (the "**Company IT Systems**"), except where the failure to own or have right to access the Company IT Systems would not reasonably be expected to have a Material Adverse Effect. The Company IT Systems are adequate for, and operate and perform in all material respects as required in connection with, the operation of the business of the Company as currently conducted, except as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect.

2.25. Environmental Laws. Except as described in the Preliminary Prospectus, the Prospectus and the Registration Statement, (A) neither the Company nor any subsidiary is in violation of any federal, state, local or foreign statute, law, rule, regulation, ordinance, code, policy or rule of common law or any judicial or administrative interpretation thereof, including any judicial or administrative order, consent, decree or judgment, relating to pollution or protection of human health, the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata) or wildlife, including, without limitation, laws and regulations relating to the release or threatened release of chemicals, pollutants, contaminants, wastes, toxic substances, hazardous substances, petroleum or petroleum products, asbestos-containing materials or mold (collectively, "**Hazardous Materials**") or to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials (collectively, "**Environmental Laws**"), except for those violations that would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect, (B) each of the Company and its subsidiaries has all permits, authorizations and approvals required under any applicable Environmental Laws and is in compliance in all material respects with their requirements, (C) there are no pending or, to the Company's knowledge, threatened administrative, regulatory or judicial actions, suits, demands, demand letters, claims, liens, notices of noncompliance or violation, investigations or proceedings relating to any Environmental Law against the Company or any subsidiary, and (D) to the Company's knowledge, there are no events or circumstances that would reasonably be expected to form the basis of an order for clean-up or remediation, or an action, suit or proceeding by any private party or governmental body or agency, against or affecting the Company or any subsidiary relating to Hazardous Materials or any Environmental Laws.

2.26. Payment of Taxes. Except as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect or where such matters are the result of a pending bona fide dispute with taxing authorities, (A) the Company and its subsidiaries have accurately prepared and timely filed all federal, state, foreign and other tax returns or other statements that are or were required to be filed by it, if any, and has paid or made provision for the payment of all taxes, assessments, governmental or other similar charges, including without limitation, all sales and use taxes and all taxes which it is obligated to withhold from amounts owing to employees, creditors and third parties, with respect to the periods covered by such tax returns (whether or not such amounts are shown as due on any tax return), (B) no deficiency assessment with respect to a proposed adjustment of the Company's or subsidiary's federal, state, local or foreign taxes is pending or, to the Company's knowledge, threatened, (C) since the date of the most recent audited financial statements, neither the Company nor any subsidiary has incurred any liability for taxes other than in the ordinary course of its business, and (D) there is no tax lien, whether imposed by any federal, state, foreign or other taxing authority, outstanding against the assets, properties or business of the Company or any subsidiary.

2.27. Insurance. The Company carries, or is covered by, insurance (issued by insurers of recognized financial responsibility to the Company's knowledge) in such amounts and covering such risks as is appropriate for the conduct of its entire business and the value of its assets, all of which insurance is in full force and effect in all material respects.

2.28. Investment Company Act. The Company is not, nor upon the sale of the Public Securities as contemplated herein and the application of the net proceeds therefrom as described in the Preliminary Prospectus, the Prospectus and the Registration Statement under the caption "Use of Proceeds", will the Company be, an "investment company" or an entity "controlled" by an "investment company" (as such terms are defined in the Investment Company Act of 1940, as amended, and the rules and regulations promulgated thereunder.

2.29. Employment Laws Compliance. The Company has not violated, or received any notice of any violation with respect to, any law, rule, regulation, order, decree or judgment applicable to it and its business, including those relating to transactions with affiliates, environmental, safety or similar laws, federal or state laws relating to discrimination in the hiring, promotion or pay of employees, federal or state wages and hours law, the Employee Retirement Income Security Act of 1974, as amended, or the rules and regulations promulgated thereunder, except for those violations that would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect.

2.30. Money Laundering Laws. The Company has not, and, to the Company's knowledge, none of the officers, directors, employees or agents purporting to act on behalf of the Company or a subsidiary, as applicable, has, made any payment of funds of the Company or a subsidiary or received or retained any funds in violation of any law, rule or regulation relating to the "know your customer" and anti-money laundering laws of any jurisdiction (collectively, the "**Money Laundering Laws**") and no action, suit or proceeding by or before any governmental entity involving the Company or a subsidiary with respect to the Money Laundering Laws is pending or, to the Company's knowledge, threatened.

2.31. OFAC. The Company has not, and, to the Company’s knowledge, none of the respective directors, officers, agents or employees purporting to act on behalf of the Company or a subsidiary, as applicable, is currently the target of or reasonably likely to become the target of any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Department of the Treasury (“**OFAC**”); and the Company and its subsidiaries will not directly or indirectly use the proceeds of the offering of the Public Securities hereunder, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity, for the purpose of financing the activities of any person currently the target of any U.S. sanctions administered by OFAC.

2.32. Lock-up agreements. Each of the Company’s officers, directors, employees and stockholders beneficially owning 5% or more of the shares of Common Stock immediately prior to the conversion of the Convertible Notes and this Offering (the “**Lock-Up Parties**”) have agreed that for a period of one year, (the “**Lock-Up Period**”) from the effective date of the Registration Statement, such persons and their affiliated parties shall not sell, contract to sell, grant any option for the sale or otherwise dispose of any of our equity securities, or any securities convertible into or exercisable or exchangeable for our equity securities, without the consent of the Representative. The Representative may consent to an early release from the Lock-Up period if, in its opinion, the market for shares of Common Stock would not be adversely impacted by sales and in cases of financial emergency of an officer, director or other stockholder. The Company has caused each of the Lock-Up Parties to deliver to the Representative the agreements of each Lock-Up Parties to the foregoing effect prior to the date that the Company requests that the Commission declare the Registration Statement effective under the Act.

2.33. Subsidiaries. Annex 2 to this Agreement sets forth the ownership of all direct and indirect subsidiaries of the Company (each a “subsidiary” and together the “subsidiaries”). All direct and indirect subsidiaries of the Company are duly organized and in good standing under the laws of the place of organization or incorporation, and each such subsidiary and is in good standing in each jurisdiction in which its ownership or lease of property or the conduct of business requires such qualification, except where the failure to qualify would not have a Material Adverse Effect.

2.34. Related Party Transactions. Except as disclosed in the Prospectus and the Registration Statement, there are no business relationships or related party transactions involving the Company or any other person required to be described in the Prospectus that have not been described as required.

2.35. Board of Directors. The Board of Directors of the Company is comprised of the persons set forth under the heading of the Prospectus captioned “Management”. The qualifications of the persons serving as board members and the overall composition of the board comply with the Sarbanes-Oxley Act of 2002 and the rules promulgated thereunder applicable to the Company and the rules of the Nasdaq Capital Market. At least one member of the Board of Directors of the Company qualifies as a “financial expert” as such term is defined under the Sarbanes-Oxley Act of 2002 and the rules promulgated thereunder and the rules of the Nasdaq Capital Market. In addition, at least a majority of the persons serving on the Board of Directors qualify as “independent” as defined under the rules of the Nasdaq Capital Market.

#### 2.36. Sarbanes-Oxley Compliance.

2.36.1. Disclosure Controls. The Company has developed and currently maintains disclosure controls and procedures that will comply with Rule 13a-15 or 15d-15 of the Exchange Act, and such controls and procedures are effective to ensure that all material information concerning the Company will be made known on a timely basis to the individuals responsible for the preparation of the Company’s Exchange Act filings and other public disclosure documents.

2.36.2. Compliance. On the Effective Date, the Company was in material compliance with the provisions of the Sarbanes-Oxley Act of 2002 applicable to it, and has implemented such programs and taken reasonable steps to ensure the Company’s future compliance (not later than the relevant statutory and regulatory deadlines therefore) with all the material provisions of the Sarbanes-Oxley Act of 2002.

3. Covenants of the Company. The Company covenants and agrees as follows:

3.1. Amendments to Registration Statement. The Company will deliver to the Representative, prior to filing, any amendment or supplement to the Registration Statement or Prospectus proposed to be filed after the Effective Date, and it will not file any such amendment or supplement to which the Representative shall reasonably object in writing.

3.2. Federal Securities Laws.

3.2.1. Compliance. During the time when a Prospectus is required to be delivered under the Act, the Company will use its best efforts to comply with all requirements imposed upon it by the Act, the Regulations and the Exchange Act and by the regulations under the Exchange Act, as from time to time in force, so far as necessary to permit the continuance of sales of or dealings in the Public Securities in accordance with the provisions hereof and the Prospectus. If at any time when a Prospectus relating to the Public Securities is required to be delivered under the Act, any event shall have occurred as a result of which, in the opinion of counsel for the Company or counsel for the Underwriters, the Prospectus, as then amended or supplemented, includes an untrue statement of a material fact or omits to state any material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, or if it is necessary at any time to amend the Prospectus to comply with the Act, the Company will notify the Representative promptly and prepare and file with the Commission, subject to Section 3.1 hereof, an appropriate amendment or supplement in accordance with Section 10 of the Act. The Representative shall be responsible for the costs, including the Company's legal and accounting fees, associated with the preparation of any amendments or supplements to the Prospectus or Registration Statement three months after the Effective Date.

3.2.2. Filing of Final Prospectus. The Company will file the Prospectus (in form and substance satisfactory to the Representative) with the Commission pursuant to the requirements of Rule 424 of the Regulations.

3.2.3. Exchange Act Registration. For a period of three years from the Effective Date, the Company will use its best efforts to maintain the registration of the shares of Common Stock under the provisions of the Exchange Act. The Company will not deregister the shares of Common Stock under the Exchange Act without the prior written consent of the Representative. The foregoing requirements shall automatically terminate in the event that the Company, directly or indirectly, in one or more related transactions, (1) sells, lease, licenses, assigns, transfers, conveys or otherwise disposes of all or substantially all of its respective properties or assets to any other person, or (2) consummates a stock or share purchase agreement or other business combination (including, without limitation, a merger, consolidation, reorganization, recapitalization, spin-off or scheme of arrangement) with any other person whereby such other person acquires more than 50% of the outstanding shares of the Company's voting stock.

3.2.4. Free Writing Prospectuses. The Company represents and agrees that it has not made and will not make any offer relating to the Public Securities that would constitute an issuer free writing prospectus, as defined in Rule 433 of the 1933 Act, without the prior consent of the Representative. Any such free writing prospectus consented to by the Representative is hereinafter referred to as a "**Permitted Free Writing Prospectus**." The Company represents that it will treat each Permitted Free Writing Prospectus as an "issuer free writing prospectus" as defined in Rule 433, and has complied and will comply with the applicable requirements of Rule 433 of the 1933 Act, including timely Commission filing where required, legending and record keeping.



3.3. Delivery to Underwriters of Prospectuses. The Company will deliver to each of the several Underwriters, without charge, except as provided in Section 3.2.1, from time to time during the period when the Prospectus is required to be delivered under the Act or the Exchange Act such number of copies of each Prospectus as such Underwriters may reasonably request and, as soon as the Registration Statement or any amendment or supplement thereto becomes effective, deliver to the Representative two original executed Registration Statements, including exhibits, and all post-effective amendments thereto and copies of all exhibits filed therewith or incorporated therein by reference and all original executed consents of certified experts. [NB: I assume we are not printing the definitive prospectus in which case this should be deleted or modified to provide for a digital prospectus.]

3.4. Effectiveness and Events Requiring Notice to the Representative. The Company will use its best efforts [NB: This clause seems to be unnecessary in light of Section 3.2.1] notify the Representative immediately and confirm the notice in writing: (i) of the effectiveness of the Registration Statement and any amendment thereto; (ii) of the issuance by the Commission of any stop order or of the initiation, or the threatening, of any proceeding for that purpose; (iii) of the issuance by any state securities commission of any proceedings for the suspension of the qualification of the Public Securities for offering or sale in any jurisdiction or of the initiation, or the threatening, of any proceeding for that purpose; (iv) of the mailing and delivery to the Commission for filing of any amendment or supplement to the Registration Statement or Prospectus; (v) of the receipt of any comments or request for any additional information from the Commission; and (vi) of the happening of any event during the period described in this Section 3.4 hereof that, in the judgment of the Company, makes any statement of a material fact made in the Registration Statement or the Prospectus untrue or that requires the making of any changes in the Registration Statement or the Prospectus in order to make the statements therein, in light of the circumstances under which they were made, not misleading. If the Commission or any state securities commission shall enter a stop order or suspend such qualification at any time, the Company will make every reasonable effort to obtain promptly the lifting of such order.

3.5. Financial Public Relations Firm. As of the Effective Date, the Company shall have retained a financial public relations firm (“I.R.”) reasonably acceptable to the Representative, and the Company shall retain such firm or another firm for a period of not less than two years after the Effective Date.

### 3.6. Reports to the Representative.

3.6.1. Periodic Reports, etc. For a period of three years from the Effective Date, the Company will furnish to the Representative copies of such financial statements and other periodic and special reports as the Company from time to time furnishes generally to holders of any class of its securities and also promptly furnish to the Representative: (i) a copy of each periodic report the Company shall be required to file with the Commission; (ii) a copy of every press release and every news item and article with respect to the Company or its affairs which was released by the Company; (iii) a copy of each Form 8-K prepared and filed by the Company; (iv) five copies of each Registration Statement; (v) such additional documents and information with respect to the Company and the affairs of any future subsidiaries of the Company as the Representative may from time to time reasonably request; provided the Representatives shall sign, if requested by the Company, a Regulation FD compliant confidentiality agreement which is reasonably acceptable to the Representative in connection with the Representative’s receipt of such information. Documents filed with the Commission pursuant to its EDGAR system shall be deemed to have been delivered to the Representative pursuant to this Section.

3.6.2. Transfer Sheets. For a period of three years from the Effective Date, the Company shall retain a transfer and registrar agent acceptable to the Representative (the “**Transfer Agent**”) and will furnish to the Representatives at the Company’s sole cost and expense such transfer sheets of the Company’s securities as the Representative may reasonably request, including the daily and monthly consolidated transfer sheets of the Transfer Agent and DTC. VStock Transfer, LLC is acceptable to the Underwriters to act as Transfer Agent for the Company’s shares of Common Stock.

3.6.3. Trading Reports. During such time as the Public Securities are listed on Nasdaq Capital Market the Company shall provide to the Representative, at its expense, such reports published by the Nasdaq Capital Market relating to price trading of the Public Securities, as the Representative shall reasonably request.

3.7. Payment of Expenses.

3.7.1. General Expenses Related to the Offering. Except as provided in Section 3.2.1, the Company hereby agrees to pay all expenses incident to the performance of the obligations of the Company under this Agreement, including, but not limited to: (i) all filing fees and communication expenses relating to the registration of the Public Securities to be sold in the Offering with the Commission; (b) all filing fees associated with the review of the Offering by FINRA; (c) all fees and expenses relating to the listing of the shares of Common Stock on NASDAQ and such other stock exchanges as the Company and the Underwriter together determine; (d) all fees, expenses and disbursements relating to background checks obtained by the Company of the Company's officers and directors and the Company to verify the disclosure in the Registration Statement; (e) all fees, expenses and disbursements relating to the registration or qualification of the Public Securities under the "blue sky" securities laws of such states and other jurisdictions as the Representative may reasonably designate; (f) all fees, expenses and disbursements relating to the registration, qualification or exemption of the Public Securities under the securities laws of such foreign jurisdictions as the Underwriters may reasonably designate; (g) the costs of all mailing and printing of the Registration Statements, Preliminary Prospectuses, Prospectuses and all amendments, supplements and exhibits thereto and as many preliminary and final Prospectuses as the Underwriters may reasonably deem necessary; (h) the costs and expenses of its public relations firm, if any; (i) the costs of preparing, printing and delivering certificates representing the Public Securities and fees and expenses of the Transfer Agent for the shares of Common Stock; (j) stock transfer and/or stamp taxes, if any, payable upon the transfer of securities from the Company to the Underwriters; (k) the fees and expenses of the Company's accountants; (l) the fees and expenses of the Company's legal counsel and other agents and representatives; and (m) the Company's actual "road show" expenses for the Offering. The Representative has the right to deduct from the net proceeds of the Offering any advance made by the Underwriters to pay for the expenses of the Company.

3.7.2. Non-accountable Expenses. The Company further agrees that, in addition to the expenses payable pursuant to Section 3.7.1, on the Closing Date it will pay to the Representative a non-accountable expense allowance equal to \$185,000 by deduction from the proceeds of the Offering contemplated herein.

3.8. Application of Net Proceeds. The Company will apply the net proceeds from the Offering received by it in a manner consistent with the application described under the caption "Estimated Use Of Proceeds" in the Prospectus.

3.9. Delivery of Earnings Statements to Security Holders. The Company will make generally available to its security holders as soon as practicable, but not later than the first day of the fifteenth full calendar month following the Effective Date, an earnings statement (which need not be certified by independent public or independent certified public accountants unless required by the Act or the Regulations, but which shall satisfy the provisions of Rule 158(a) under Section 11(a) of the Act) covering a period of at least twelve consecutive months beginning after the Effective Date.

3.10. Stabilization. Neither the Company, nor, to its knowledge, any of its employees, directors or stockholders (without the consent of the Representative) has taken or will take, directly or indirectly, any action designed to or that has constituted or that might reasonably be expected to cause or result in, under the Exchange Act, or otherwise, stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Common Stock.

3.11. Internal Controls. The Company will maintain a system of internal accounting controls sufficient to provide reasonable assurances that: (i) transactions are executed in accordance with management's general or specific authorization; (ii) transactions are recorded as necessary in order to permit preparation of financial statements in accordance with GAAP and to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

3.12. Accountants. As of the Effective Date, the Company shall retain Armanino or other independent public accountants reasonably acceptable to the Representative, and the Company shall continue to retain a nationally recognized independent certified public accounting firm for a period of at least three years after the Effective Date.

3.13. 3.14. No Fiduciary Duties. The Company acknowledges and agrees that the Underwriters' responsibility to the Company is solely contractual in nature and that none of the Underwriters or their affiliates or agents shall be deemed to be acting in a fiduciary capacity, or otherwise owes any fiduciary duty to the Company or any of its affiliates in connection with the Offering and the other transactions contemplated by this Agreement.

4. Conditions of Underwriters' Obligations. The obligations of the several Underwriters to purchase and pay for the Public Securities, as provided herein, shall be subject to the continuing accuracy of the representations and warranties of the Company as of the date hereof and as of each of the Closing Date and the Option Closing Date, if any, and to the performance by the Company of its obligations hereunder and to the following conditions:

4.1. Regulatory Matters.

4.1.1. Effectiveness of Registration Statement. The Registration Statement shall have become effective not later than 5:00 P.M., Eastern time, on the date of this Agreement or such later date and time as shall be consented to in writing by you, and, at each of the Closing Date and the Option Closing Date, no stop order suspending the effectiveness of the Registration Statement shall have been issued and no proceedings for that purpose shall have been instituted or shall be pending or contemplated by the Commission and any request on the part of the Commission for additional information shall have been complied with to the reasonable satisfaction of the Representative.

4.1.2. FINRA Clearance. By the Effective Date, the Representative shall have received oral clearance from FINRA as to the amount of compensation allowable or payable to the Underwriters as described in the Registration Statement.

4.1.3. Nasdaq Clearance. On the Closing Date, the Company's shares of Common Stock, including the Public Securities, shall have been approved for listing on the Nasdaq Capital Market.

4.1.4. Free Writing Prospectuses. Each Underwriter severally covenants with the Company not to take any action that would result in the Company being required to file with the Commission under Rule 433(d) a free writing prospectus prepared by or on behalf of such Underwriter that otherwise would not be required to be filed by the Company thereunder, but for the action of the Underwriter. Any such free writing prospectus consented to by the Company is hereinafter referred to as an "**Underwriter Free Writing Prospectus**." [NB: This is a covenant (not a condition) and should be relocated to a more appropriate spot.]

#### 4.2. Company Counsel Matters.

4.2.1. Closing Date Opinion of Counsel. On the Closing Date, the Representative shall have received the favorable opinion of Greenberg Traurig, LLP, counsel to the Company (“GT”), dated the Closing Date, addressed to the Representative, in form and substance reasonably satisfactory in all respects to the Representative. [NB: we are generally OK with the text of the opinion, but would prefer not to put in a public document. I assume Armanino feels the same way about the comfort letter.]

The opinion of GT shall include a statement to the effect that such counsel has participated in conferences with officers and other representatives of the Company, the Underwriters and the independent registered public accounting firm of the Company, at which conferences the contents of the Preliminary Prospectus, the Prospectus and Registration Statement contained therein and related matters were discussed and, although such counsel is not passing upon and does not assume any responsibility for the accuracy, completeness or fairness of the statements contained in the Preliminary Prospectus, the Prospectus and the Registration Statement contained therein, solely on the basis of the foregoing without independent check and verification, no facts have come to the attention of such counsel which lead them to believe that the Registration Statement or any amendment thereto, at the time the Registration Statement or amendment became effective, contained an untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein not misleading or the Prospectus or any amendment or supplement thereto, at the time they were filed pursuant to Rule 424(b) or at the date of such counsel’s opinion, contained an untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statement therein, in light of the circumstances under which they were made, not misleading (except that such counsel need express no view and shall not be deemed to have rendered an opinion with respect to the financial information and statistical data). The Registration Statement and the Prospectus and any post-effective amendments or supplements thereto (other than the financial statements including notes and schedules, financial data and statistical data included therein, as to which no opinion need be rendered) each as of their respective dates complied as to form in all material respects with the requirements of the Act and Regulations.

4.2.4 Option Closing Date Opinion of Counsel. On the Option Closing Date, if any, the Representative shall have received the favorable opinion of GT, dated the Option Closing Date, addressed to the Representative and in form and substance reasonably satisfactory to the Representative, confirming as of the Option Closing Date, the statements made by such counsel in its opinion delivered on the Closing Date.

4.2.5. Reliance. In rendering its opinion, GT may rely: (i) as to matters involving the application of laws other than the laws of the United States and jurisdictions in which they are admitted, to the extent such counsel deems proper and to the extent specified in such opinion, if at all, upon an opinion or opinions (in form and substance reasonably satisfactory to the Representative) of other counsel reasonably acceptable to the Representative, familiar with the applicable laws; and (ii) as to matters of fact, to the extent they deem proper, on certificates or other written statements of officers of the Company and officers of departments of various jurisdictions having custody of documents respecting the corporate existence or good standing of the Company, provided that copies of any such statements or certificates shall be delivered to GEAB&P if requested. The opinion of GT and any opinion relied upon by GT shall include a statement to the effect that it may be relied upon by counsel for the Underwriters in its opinion delivered to the Underwriters.

4.3. Cold Comfort Letter. At the time this Agreement is executed, and at each of the Closing Date and the Option Closing Date, if any, the Representative shall have received a letter in form and substance satisfactory in all respects to the Representative and to GEAB&P from Armanino dated, respectively, as of the date of this Agreement and as of the Closing Date and the Option Closing Date, if any, with respect to the financial statements and certain financial information contained in the Preliminary Prospectus, the Prospectus and the Registration Statement.

#### 4.4. Officers' Certificates.

4.4.1. Officers' Certificate. At each of the Closing Date and the Option Closing Date, if any, the Representative shall have received a certificate of the Company signed by the Chairman of the Board and Chief Executive Officer of the Company, who can be the same person, dated the Closing Date or the Option Closing Date, as the case may be, respectively, to the effect that the Company has performed all covenants and complied with all conditions required by this Agreement to be performed or complied with by the Company prior to and as of the Closing Date, or the Option Closing Date, as the case may be, and that the conditions set forth in Section 4.5 hereof have been satisfied as of such date and that, as of the Closing Date and the Option Closing Date, as the case may be, the representations and warranties of the Company set forth in Section 2 hereof are true and correct in all material respects. In addition, the Representative will have received such other and further certificates of officers of the Company as the Representative may reasonably request.

4.4.2. Secretary's Certificate. At each of the Closing Date and the Option Closing Date, if any, the Representative shall have received a certificate of the Company signed by the Secretary or Assistant Secretary of the Company, dated the Closing Date or the Option Date, as the case may be, respectively, certifying: (i) that the Certificate of Incorporation is true and complete, has not been modified and is in full force and effect; (ii) that the resolutions of the Company's Board of Directors relating to the public offering contemplated by this Agreement are in full force and effect and have not been modified; (iii) all correspondence between the Company or its counsel and the Commission; and (iv) as to the incumbency of the officers of the Company. The documents referred to in such certificate shall be attached to such certificate.

4.5. No Material Changes. Prior to and on each of the Closing Date and the Option Closing Date, if any: (i) there shall have been no material adverse change or development involving a prospective material adverse change in the condition or the business activities, financial or otherwise, of the Company from the latest dates as of which such condition is set forth in the Registration Statement and Prospectus taken as a whole; (ii) no action suit or proceeding, at law or in equity, shall have been pending or threatened against the Company or any officers or directors before or by any court or federal or state commission, board or other administrative agency wherein an unfavorable decision, ruling or finding may materially adversely affect the business, operations, or financial condition or income of the Company, except as set forth in the Registration Statement and Prospectus; (iii) no stop order shall have been issued under the Act and no proceedings therefore shall have been initiated or threatened by the Commission; and (iv) the Registration Statement and the Prospectus and any amendments or supplements thereto shall contain all material statements which are required to be stated therein in accordance with the Act and the Regulations and shall conform in all material respects to the requirements of the Act and the Regulations, and neither the Registration Statement nor the Prospectus nor any amendment or supplement thereto shall contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

#### 4.6. Delivery of Agreements.

4.6.1. Effective Date Deliveries. On the Effective Date, the Company shall have delivered to the Representative executed copies of this Agreement, the Underwriters' Warrant Agreement and the Lock-Up Agreement.

4.6.2. Closing Date Deliveries. On the Closing Date, the Company shall have delivered to the Underwriters the Firm Shares, and on the Option Closing Date, if any, the Company shall have delivered to the Underwriters the Option Shares.

## 5. Indemnification.

### 5.1. Indemnification of Underwriters.

5.1.1 General. Subject to the conditions set forth below, the Company agrees to indemnify and hold harmless each of the Underwriters, and each dealer selected by the Representative that participates in the offer and sale of the Public Securities (each a “**Selected Dealer**”) and each of their respective directors, officers and employees and each person, if any, who controls any such Underwriter (“**Controlling Person**”) within the meaning of Section 15 of the Act or Section 20(a) of the Exchange Act, against any and all loss, liability, claim, damage and expense whatsoever (including but not limited to any and all legal or other expenses reasonably incurred in investigating, preparing or defending against any litigation, commenced or threatened, or any claim whatsoever, whether arising out of any action between any of the Underwriters and the Company or between any of the Underwriters and any third party or otherwise) (collectively, “**Loss**”) to which they or any of them may become subject under the Act, the Exchange Act or any other statute or at common law or otherwise or under the laws of foreign countries, arising out of or based upon any untrue statement or alleged untrue statement of a material fact contained in (i) the Preliminary Prospectus, the Registration Statement or the Prospectus (as from time to time each may be amended and supplemented); (ii) any materials or information provided to investors by, or with the approval of, the Company in connection with the marketing of the offering of the Public Securities, including any “road show” or investor presentations made to investors by the Company (whether in person or electronically); or (iii) any application or other document or written communication (in this Section 5, collectively called “application”) executed by the Company or based upon written information furnished by the Company in any jurisdiction in order to qualify the Public Securities under the securities laws thereof or filed with the Commission, any state securities commission or agency, Nasdaq Capital Market or any securities exchange; or the omission or alleged omission therefrom of a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, unless such statement or omission was made in reliance upon and in conformity with the Underwriters’ Information. The Company agrees promptly to notify the Representative of the commencement of any litigation or proceedings against the Company or any of its officers, directors or controlling persons in connection with the issue and sale of the Public Securities or in connection with the Registration Statement or Prospectus.

5.1.2. Procedure. If any action is brought against an Underwriter, a Selected Dealer or a Controlling Person in respect of which indemnity may be sought against the Company pursuant to Section 5.1.1, such Underwriter or such Selected Dealer shall promptly notify the Company in writing of the institution of such action and the Company shall assume the defense of such action, including the employment and fees of counsel (subject to the reasonable approval of such Underwriter or such Selected Dealer, as the case may be) and payment of actual expenses. Such Underwriter, such Selected Dealer or Controlling Person shall have the right to employ its or their own counsel in any such case, but the fees and expenses of such counsel shall be at the expense of such Underwriter, such Selected Dealer or Controlling Person unless (i) counsel for the Representative reasonably determines that it would be inappropriate under the applicable rules of professional responsibility for the same counsel to represent both the Company and the party being indemnified, or (ii) the employment of such counsel at the expense of the Company shall have been authorized in writing by the Company in connection with the defense of such action, or (iii) the Company shall not have employed counsel to have charge of the defense of such action, or (iv) such indemnified party or parties shall have reasonably concluded that there may be defenses available to it or them which are different from or additional to those available to the Company (in which case the Company shall not have the right to direct the defense of such action on behalf of the indemnified party or parties), in any of which events the reasonable fees and expenses of not more than one additional firm of attorneys selected by the Underwriter, Selected Dealer and/or Controlling Person shall be borne by the Company. Notwithstanding anything to the contrary contained herein, if any Underwriter, Selected Dealer or Controlling Person shall assume the defense of such action as provided above, the Company shall have the exclusive right to settle the claim or proceeding provided that the Company will not settle any such claim, action or proceeding without the prior written consent of the Representative, which will not be unreasonably withheld. The Company shall not be liable under this Section 5.1 for any settlements entered into by an Underwriter, Selected Dealer or Controlling Person without the Company’s prior written consent, which shall not be unreasonably withheld, delayed or conditioned.

5.2. Indemnification of the Company. Each Underwriter, severally and not jointly, agrees to indemnify and hold harmless the Company, its directors, officers and employees and agents who control the Company within the meaning of Section 15 of the Act or Section 20 of the Exchange Act against any and all Loss, as incurred, but only with respect to untrue statements or omissions, or alleged untrue statements or omissions made in the Preliminary Prospectus, the Registration Statement or Prospectus or any amendment or supplement thereto or in any application, in reliance upon, and in strict conformity with the Underwriters' Information. In case any action shall be brought against the Company or any other person so indemnified based on the Preliminary Prospectus, the Registration Statement or Prospectus or any amendment or supplement thereto or any application, and in respect of which indemnity may be sought against any Underwriter, such Underwriter shall have the rights and duties given to the Company, and the Company and each other person so indemnified shall have the rights and duties given to the several Underwriters by the provisions of Section 5.1.2.

### 5.3 Contribution.

5.3.1. Contribution Rights. In order to provide for just and equitable contribution under the Act in any case in which (i) any person entitled to indemnification under this Section 5 makes claim for indemnification pursuant hereto but it is judicially determined (by the entry of a final judgment or decree by a court of competent jurisdiction and the expiration of time to appeal or the denial of the last right of appeal) that such indemnification may not be enforced in such case notwithstanding the fact that this Section 5 provides for indemnification in such case, or (ii) contribution under the Act, the Exchange Act or otherwise may be required on the part of any such person in circumstances for which indemnification is provided under this Section 5, then, and in each such case, the Company and the Underwriters shall contribute to the aggregate Losses of the nature contemplated by said indemnity agreement incurred by the Company and the Underwriters, as incurred, in such proportions that the Underwriters are responsible for that portion represented by the percentage that the underwriting discount appearing on the cover page of the Prospectus bears to the initial offering price appearing thereon and the Company is responsible for the balance; provided, that, no person guilty of a fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. Notwithstanding the provisions of this Section 5.3.1, no Underwriter shall be required to contribute any amount in excess of the amount by which the total price at which the Public Securities underwritten by it and distributed to the public were offered to the public exceeds the amount of any damages that such Underwriter has otherwise been required to pay in respect of such Losses. For purposes of this Section, each director, officer and employee of an Underwriter or the Company, as applicable, and each person, if any, who controls an Underwriter or the Company, as applicable, within the meaning of Section 15 of the Act shall have the same rights to contribution as such Underwriter or the Company, as applicable.

5.3.2. Contribution Procedure. Within fifteen days after receipt by any party to this Agreement (or its representative) of notice of the commencement of any action, suit or proceeding, such party will, if a claim for contribution in respect thereof is to be made against another party ("**contributing party**"), notify the contributing party of the commencement thereof, but the omission to so notify the contributing party will not relieve it from any liability which it may have to any other party other than for contribution hereunder. In case any such action, suit or proceeding is brought against any party, and such party notifies a contributing party or its representative of the commencement thereof within the aforesaid fifteen days, the contributing party will be entitled to participate therein with the notifying party and any other contributing party similarly notified. Any such contributing party shall not be liable to any party seeking contribution on account of any settlement of any claim, action or proceeding affected by such party seeking contribution on account of any settlement of any claim, action or proceeding affected by such party seeking contribution without the written consent of such contributing party. The contribution provisions contained in this Section are intended to supersede, to the extent permitted by law, any right to contribution under the Act, the Exchange Act or otherwise available. Each Underwriter's obligations to contribute pursuant to this Section 5.3 are several and not joint.

## 6. Default by an Underwriter.

6.1. Default Not Exceeding 10% of Firm Shares or Option Shares. If any Underwriter or Underwriters shall default in its or their obligations to purchase the Firm Shares or the Option Shares, if the Over-allotment Option is exercised, hereunder, and if the number of the Firm Shares or Option Shares with respect to which such default relates does not exceed in the aggregate 10% of the number of Firm Shares or Option Shares that all Underwriters have agreed to purchase hereunder, then such Firm Shares or Option Shares to which the default relates shall be purchased by the non-defaulting Underwriters in proportion to their respective commitments hereunder.

6.2. Default Exceeding 10% of Firm Shares or Option Shares. In the event that the default addressed in Section 6.1 relates to more than 10% of the Firm Shares or Option Shares, you may in your discretion arrange for yourself or for another party or parties to purchase such Firm Shares or Option Shares to which such default relates on the terms contained herein. If, within one (1) Business Day after such default relating to more than 10% of the Firm Shares or Option Shares, you do not arrange for the purchase of such Firm Shares or Option Shares, then the Company shall be entitled to a further period of one (1) Business Day within which to procure another party or parties satisfactory to you to purchase said Firm Shares or Option Shares on such terms. In the event that neither you nor the Company arrange for the purchase of the Firm Shares or Option Shares to which a default relates as provided in this Section 6, this Agreement will automatically be terminated by you or the Company without liability on the part of the Company (except as provided in Sections 3.10 and 5 hereof) or the several Underwriters (except as provided in Section 5 hereof); *provided, however*, that if such default occurs with respect to the Option Shares, this Agreement will not terminate as to the Firm Shares; and provided further that nothing herein shall relieve a defaulting Underwriter of its liability, if any, to the other Underwriters and to the Company for damages occasioned by its default hereunder.

6.3. Postponement of Closing Date. In the event that the Firm Shares or Option Shares to which the default relates are to be purchased by the non-defaulting Underwriters, or are to be purchased by another party or parties as aforesaid, you or the Company shall have the right to postpone the Closing Date or Option Closing Date for a reasonable period, but not in any event exceeding five (5) Business Days, in order to effect whatever changes may thereby be made necessary in the Registration Statement or the Prospectus or in any other documents and arrangements, and the Company agrees to file promptly any amendment to the Registration Statement or the Prospectus that in the opinion of counsel for the Underwriter may thereby be made necessary. The term "Underwriter" as used in this Agreement shall include any party substituted under this Section 6 with like effect as if it had originally been a party to this Agreement with respect to such securities.

## 7. Additional Covenants.

7.1. Board Composition and Board Designations. The Company shall ensure that: (i) the qualifications of the persons serving as board members and the overall composition of the board comply with the Sarbanes-Oxley Act of 2002 and the rules promulgated thereunder and with the listing requirements of the NYSE, the NYSE MKT, NASDAQ or any other national securities exchange or national securities association, as the case may be, in the event the Company seeks to have its Public Securities listed on another exchange or quoted on an automated quotation system, and (ii) if applicable, at least one member of the board of directors qualifies as a "financial expert" as such term is defined under the Sarbanes-Oxley Act of 2002 and the rules promulgated thereunder.

7.2. Prohibition on Press Releases and Public Announcements. The Company will not issue press releases or engage in any other publicity, without the Representative's prior written consent, for a period ending at 5:00 p.m. Eastern time on the first business day following the 40th day following the Closing Date, other than normal and customary releases issued in the ordinary course of the Company's business.



7.3. Blue Sky Compliance. The Company shall be responsible for the qualification or registration of the Public Securities for sale under (or obtain exemptions from the application of) the state securities or blue sky laws of those jurisdictions in the United States designated by the Representative, shall comply with such laws and shall continue such qualifications, registrations and exemptions in effect so long as required for the distribution of the shares of Common Stock, if such filings are so required. The Company shall not be required to qualify as a foreign corporation or to take any action that would subject it to general service of process in any such jurisdiction where it is not presently qualified or where it would be subject to taxation as a foreign corporation. The Company will advise the Representative promptly of the suspension of the qualification or registration of (or any such exemption relating to) the Public Securities for offering, sale or trading in any jurisdiction or any initiation or threat of any proceeding for any such purpose, and in the event of the issuance of any order suspending such qualification, registration or exemption, the Company shall use its best efforts to obtain the withdrawal thereof at the earliest possible moment. The Company will, from time to time, prepare and file such statements, reports, certificates, notices and other forms and documents as are or may be required to continue such qualifications in effect for so long as the Representative may request for the distribution of the Public Securities.

#### 8. Effective Date of this Agreement and Termination Thereof.

8.1. Effective Date. This Agreement shall become effective when both the Company and the Representative have executed the same and delivered counterparts of such signatures to the other party.

8.2. Termination. You shall have the right to terminate this Agreement at any time prior to any Closing Date, (i) if any domestic or international event or act or occurrence has materially disrupted, or in your opinion will in the immediate future materially disrupt, general securities markets in the United States; or (ii) if trading on the NYSE Euronext, the NASDAQ Global Market or the NASDAQ Capital Market shall have been suspended or materially limited, or minimum or maximum prices for trading shall have been fixed, or maximum ranges for prices for securities shall have been required by FINRA or by order of the Commission or any other government authority having jurisdiction, or (iii) if the United States shall have become involved in a new war or an increase in major hostilities, or (iv) if a banking moratorium has been declared by a New York State or federal authority, or (v) if a moratorium on foreign exchange trading has been declared which materially adversely impacts the United States securities markets, or (vi) if the Company shall have sustained a material loss by fire, flood, accident, hurricane, earthquake, theft, sabotage or other calamity or malicious act which, whether or not such loss shall have been insured, will, in your opinion, make it inadvisable to proceed with the delivery of the Firm Shares or Option Shares, or (vii) if the Company is in material breach of any of its representations, warranties or covenants hereunder, or (viii) if the Representative shall have become aware after the date hereof of such a material adverse change in the conditions or prospects of the Company, or such adverse material change in general market conditions as in the Representative's reasonable judgment would make it impracticable to proceed with the offering, sale and/or delivery of the securities or to enforce contracts made by the Underwriters for the sale of the securities.

8.3. Expenses. Except in the case of a default by the Underwriters pursuant to Section 6.2 above or termination pursuant to Section 8.2(i)-(v), in which case each party shall be obligated for its own fees and expenses, in the event that this Agreement shall not be carried out for any reason whatsoever, within the time specified herein or any extensions thereof pursuant to the terms herein, the Company shall be obligated to pay to the Underwriters their actual and accountable out of pocket expenses related to the transactions contemplated herein up to a maximum of \$185,000 for all such expenses.

8.4. Indemnification. Notwithstanding any contrary provision contained in this Agreement, any election hereunder or any termination of this Agreement, and whether or not this Agreement is otherwise carried out, the provisions of Section 5 shall not be in any way effected by, such election or termination or failure to carry out the terms of this Agreement or any part hereof.

9. Miscellaneous.

9.1. Notices. All communications hereunder, except as herein otherwise specifically provided, shall be in writing and shall be mailed (registered or certified mail, return receipt requested), personally delivered or sent by either facsimile transmission or electronic mail and in either case confirmed and shall be deemed given when so delivered or faxed or emailed and confirmed or if mailed, two days after such mailing.

If to the Representative:

National Securities Corporation  
410 Park Avenue, 14th Floor  
New York, NY 10022  
Attn:  
Fax No.:  
Email:

Copy to (which shall not constitute notice):

Golenbock Eiseman Assor Bell & Peskoe LLP  
437 Madison Avenue, 40th Floor  
New York, NY 10022  
Attn: Andrew D. Hudders, Esq.  
Fax: (212) 754-0330  
Email:

If to the Company:

Aqua Metals, Inc.  
501 23rd Avenue  
Oakland, CA 94606  
Attn: Stephen R. Clarke  
Fax: (510) \_\_\_\_\_  
Email: Steve.Clarke@aquametals.com

Copy to (which shall not constitute notice):

Greenberg Traurig, LLP  
3161 Michelson Drive, Suite 1000  
Irvine, CA 92612  
Attn: Daniel K. Donahue, Esq.  
Fax: (949) 732-6501  
Email: donahued@gtlaw.com

9.2. Headings. The headings contained herein are for the sole purpose of convenience of reference, and shall not in any way limit or affect the meaning or interpretation of any of the terms or provisions of this Agreement.

9.3. Amendment. This Agreement may only be amended by a written instrument executed by each of the parties hereto.

9.4. Entire Agreement. This Agreement (together with the other agreements and documents being delivered pursuant to or in connection with this Agreement) constitutes the entire agreement of the parties hereto with respect to the subject matter hereof and thereof, and supersedes all prior agreements and understandings of the parties, oral and written, with respect to the subject matter hereof.

9.5. Binding Effect. This Agreement shall inure solely to the benefit of and shall be binding upon the Representative, the Underwriters, the Company and the controlling persons, directors and officers referred to in Section 5 hereof, and their respective successors, legal representatives and assigns, and no other person shall have or be construed to have any legal or equitable right, remedy or claim under or in respect of or by virtue of this Agreement or any provisions herein contained. The term “successors and assigns” shall not include a purchaser, in its capacity as such, of securities from any of the Underwriters.

9.6. Governing Law. This Agreement shall be governed by and construed and enforced in accordance with the laws of the State of New York, without giving effect to conflict of laws. The Company hereby agrees that any action, proceeding or claim against it arising out of, or relating in any way to this Agreement shall be brought and enforced in the courts of the State of New York of the United States of America for the Southern District of New York, and irrevocably submits to such jurisdiction, which jurisdiction shall be exclusive. The Company hereby waives any objection to such exclusive jurisdiction and that such courts represent an inconvenient forum. Any such process or summons to be served upon the Company may be served by transmitting a copy thereof by registered or certified mail, return receipt requested, postage prepaid, addressed to it at the address set forth in Section 9.1 hereof. Such mailing shall be deemed personal service and shall be legal and binding upon the Company in any action, proceeding or claim. The Company agrees that the prevailing party(ies) in any such action shall be entitled to recover from the other party(ies) all of its reasonable attorneys’ fees and expenses relating to such action or proceeding and/or incurred in connection with the preparation therefor.

9.7. Execution in Counterparts. This Agreement may be executed in one or more counterparts, and by the different parties hereto in separate counterparts, each of which shall be deemed to be an original, but all of which taken together shall constitute one and the same agreement, and shall become effective when one or more counterparts has been signed by each of the parties hereto and delivered to each of the other parties hereto. Delivery of a signed counterpart of this Agreement by facsimile or email/pdf transmission shall constitute valid and sufficient delivery thereof.

9.8. Waiver, etc. The failure of any of the parties hereto to at any time enforce any of the provisions of this Agreement shall not be deemed or construed to be a waiver of any such provision, nor to in any way effect the validity of this Agreement or any provision hereof or the right of any of the parties hereto to thereafter enforce each and every provision of this Agreement. No waiver of any breach, non-compliance or non-fulfillment of any of the provisions of this Agreement shall be effective unless set forth in a written instrument executed by the party or parties against whom or which enforcement of such waiver is sought; and no waiver of any such breach, non-compliance or non-fulfillment shall be construed or deemed to be a waiver of any other or subsequent breach, non-compliance or non-fulfillment.

[SIGNATURE PAGE FOLLOWS]

If the foregoing correctly sets forth the understanding between the Underwriters and the Company, please so indicate in the space provided below for that purpose, whereupon this letter shall constitute a binding agreement between us.

Very truly yours,

AQUA METALS, INC.

By: \_\_\_\_\_  
Name:  
Title:

Accepted on the date first above written.

NATIONAL SECURITIES CORPORATION

By: \_\_\_\_\_  
Name:  
Title:

**SCHEDULE 1**

<b>Name of Underwriter</b>	<b>Number of Firm Shares</b>
National Securities Corporation	[ ]



NOT VALID UNLESS COUNTERSIGNED BY TRANSFER AGENT

Countersigned by **VStock Transfer**  
Woodmere, NY 11598

Authorized Signature

The following abbreviations, when used in the inscription on the face of this certificate, shall be construed as though they were written out in full according to applicable laws or regulations.

TEN COM	- as tenants in common	UNIF GIFT MIN ACT _____	Custodian _____
TEN ENT	- as tenants by the entireties		(Cust) _____ (Minor)
JT TEN	- as joint tenants with the right of survivorship and not as tenants in common	Act _____	(State)

Additional abbreviations may also be used though not in the above list.

For value received, \_\_\_\_\_ hereby sell, assign and transfer unto PLEASE INSERT SOCIAL SECURITY OR OTHER IDENTIFYING NUMBER OF ASSIGNEE:

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(PLEASE PRINT OR TYPEWRITE NAME AND ADDRESS, INCLUDING ZIP CODE, OF ASSIGNEE)

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shares of the capital stock represented by the within Certificate, and do hereby irrevocably constitute and appoint

\_\_\_\_\_, Attorney to transfer the said stock on the books of the within named Corporation with full power of substitution in the premises.

Dated \_\_\_\_\_

**X** \_\_\_\_\_

THE SIGNATURE TO THIS ASSIGNMENT MUST CORRESPOND WITH THE NAME AS WRITTEN UPON THE FACE OF THIS CERTIFICATE. THE SIGNATURE(S) MUST BE GUARANTEED BY AN ELIGIBLE GUARANTOR INSTITUTION (Banks, Stockbrokers, Savings and Loan Associations and Credit Unions).

SIGNATURE GUARANTEED:

**TRANSFER FEE WILL APPLY**

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THIS WARRANT AND THE SECURITIES ISSUABLE UPON EXERCISE HEREOF HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR ANY OTHER SECURITIES LAWS AND MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF (1) AN EFFECTIVE REGISTRATION STATEMENT COVERING SUCH SECURITIES UNDER THE SECURITIES ACT AND ANY OTHER APPLICABLE SECURITIES LAWS, OR (2) AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED.

IN ADDITION, THIS WARRANT AND THE SECURITIES ISSUABLE UPON EXERCISE HEREOF MAY NOT BE SOLD, TRANSFERRED, ASSIGNED, PLEDGED, OR HYPOTHECATED, OR BE THE SUBJECT OF ANY HEDGING, SHORT SALE, DERIVATIVE, PUT, OR CALL TRANSACTION THAT WOULD RESULT IN THE EFFECTIVE ECONOMIC DISPOSITION OF SUCH SECURITIES BY ANY PERSON FOR A PERIOD OF THREE HUNDRED (360) DAYS IMMEDIATELY FOLLOWING THE DATE OF EFFECTIVENESS OF THE PUBLIC OFFERING OF THE COMPANY'S SECURITIES PURSUANT TO REGISTRATION STATEMENT NO.: 333-204826 AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION, EXCEPT IN ACCORDANCE WITH FINRA RULE 5110(G)(2).

AQUA METALS, INC.

UNDERWRITER WARRANT

[ ] shares of Common Stock

[ ], 2015

This UNDERWRITER WARRANT (this "Warrant") of Aqua Metals, Inc., a corporation, duly organized and validly existing under the laws of the State of Delaware (the "Company"), is being issued pursuant to that certain Underwriting Agreement, dated [ ], 2015 (the "Underwriting Agreement"), between the Company and National Securities Corporation (the "Underwriter") relating to a firm commitment public offering (the "Offering") of shares of common stock, \$0.001 par value, of the Company (the "Common Stock") underwritten by the Underwriter.

FOR VALUE RECEIVED, the Company hereby grants to National Securities Corporation and its permitted successors and assigns (collectively, the "Holder") the right to purchase from the Company up to [ ] shares of Common Stock (such shares underlying this Warrant, the "Warrant Shares"), at a per share purchase price equal to \$[●] (the "Exercise Price"), subject to the terms, conditions and adjustments set forth below in this Warrant.

1. Date of Warrant Exercise. This Warrant shall become exercisable three hundred sixty (360) days after the Base Date (the "Exercise Date"). As used in this Warrant, the term "Base Date" shall mean [ ], 2015 (the effective date of the registration statement). Except as permitted by applicable rules of the Financial Industry Regulatory Authority, Inc. ("FINRA"), this Warrant and the underlying Warrant Shares shall not be sold, transferred, assigned, pledged or hypothecated prior to the date that is one hundred eighty (180) days immediately following the Base Date pursuant to FINRA Rule 5110(g)(1), except as permitted under FINRA Rule 5110(g)(2).

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2. Expiration of Warrant. This Warrant shall expire on the five (5) year anniversary of the Base Date (the “**Expiration Date**”).

3. Exercise of Warrant. This Warrant shall be exercisable pursuant to the terms of this Section 3.

3.1 Manner of Exercise.

(a) This Warrant may only be exercised by the Holder hereof on or after the Exercise Date and on or prior to the Expiration Date, in accordance with the terms and conditions hereof, in whole or in part (but not as to fractional shares) with respect to any portion of this Warrant, during the Company’s normal business hours on any day other than a Saturday or a Sunday or a day on which commercial banking institutions in New York, New York are authorized by law to be closed (a “**Business Day**”), by surrender of this Warrant to the Company at its office maintained pursuant to Section 10.2(a) hereof, accompanied by a written exercise notice in the form attached as Exhibit A to this Warrant (or a reasonable facsimile thereof) duly executed by the Holder, together with the payment of the aggregate Exercise Price for the number of Warrant Shares purchased upon exercise of this Warrant. Upon surrender of this Warrant, the Company shall cancel this Warrant document and shall, in the event of partial exercise, replace it with a new Warrant document in accordance with Section 3.3.

(b) Except as provided for in Section 3.1(c) below, each exercise of this Warrant must be accompanied by payment in full of the aggregate Exercise Price in cash by check or wire transfer in immediately available funds for the number of Warrant Shares being purchased by the Holder upon such exercise.

(c) The aggregate Exercise Price for the number of Warrant Shares being purchased may also, in the sole discretion of the Holder, be paid in full or in part on a “cashless basis” at the election of the Holder:

- (i) in the form of Common Stock owned by the Holder (based on the Fair Market Value (as defined below) of such Common Stock on the date of exercise);
- (ii) in the form of Warrant Shares withheld by the Company from the Warrant Shares otherwise to be received upon exercise of this Warrant having an aggregate Fair Market Value on the date of exercise equal to the aggregate Exercise Price of the Warrant Shares being purchased by the Holder; or
- (iii) by a combination of the foregoing, provided that the combined value of all cash and the Fair Market Value of any shares surrendered to the Company is at least equal to the aggregate Exercise Price for the number of Warrant Shares being purchased by the Holder.

For purposes of this Warrant, the term “**Fair Market Value**” means with respect to a particular date, the average closing price of the Common Stock for the five (5) trading days immediately preceding the applicable exercise herein as officially reported by the principal securities exchange on which the Common Stock is then listed or admitted to trading, or, if the Common Stock is not listed or admitted to trading on any securities exchange as determined in good faith by resolution of the Board of Directors of the Company, based on the best information available to it.

To illustrate a cashless exercise of this Warrant under Section 3.1 (c)(ii) (or for a portion thereof for which cashless exercise treatment is requested as contemplated by Section 3.1(c)(iii) hereof), the calculation of such exercise shall be as follows:

$$X = Y (A-B)/A$$

where:

X = the number of Warrant Shares to be issued to the Holder (rounded to the nearest whole share).

Y = the number of Warrant Shares with respect to which this Warrant is being exercised.

A = the Fair Market Value of the Common Stock.

B = the Exercise Price.

(d) For purposes of Rule 144 and sub-section (d)(3)(ii) thereof, it is intended, understood, and acknowledged that the Common Stock issuable upon exercise of this Warrant in a cashless exercise transaction as described in Section 3.1(c) above shall be deemed to have been acquired at the time this Warrant was issued. Moreover, it is intended, understood, and acknowledged that the holding period for the Common Stock issuable upon exercise of this Warrant in a cashless exercise transaction as described in Section 3.1(c) above shall be deemed to have commenced on the date this Warrant was issued.

3 . 2 When Exercise Effective. Each exercise of this Warrant shall be deemed to have been effected immediately prior to the close of business on the Business Day on which this Warrant shall have been duly surrendered to the Company as provided in Sections 3.1 and 12 hereof, and, at such time, the Holder in whose name any certificate or certificates for Warrant Shares shall be issuable upon exercise as provided in Section 3.3 hereof shall be deemed to have become the holder or holders of record thereof of the number of Warrant Shares purchased upon exercise of this Warrant.

3.3 Delivery of Common Stock Certificates and New Warrant. As soon as reasonably practicable after each exercise of this Warrant, in whole or in part, and in any event within three (3) Business Days thereafter, the Company, at its expense (including the payment by it of any applicable issue taxes), will cause to be issued in the name of and delivered to the Holder hereof or, subject to Sections 9 and 10 hereof, as the Holder (upon payment by the Holder of any applicable transfer taxes) may direct:

(a) a certificate or certificates (with appropriate restrictive legends, as applicable) for the number of duly authorized, validly issued, fully paid and non-assessable Warrant Shares to which the Holder shall be entitled upon exercise; and

(b) in case exercise is in part only, a new Warrant document of like tenor, dated the date hereof, for the remaining number of Warrant Shares issuable upon exercise of this Warrant after giving effect to the partial exercise of this Warrant (including the delivery of any Warrant Shares as payment of the Exercise Price for such partial exercise of this Warrant).

4. Certain Adjustments. For so long as this Warrant is outstanding:

4.1 Mergers or Consolidations. If at any time after the date hereof there shall be a capital reorganization (other than a combination or subdivision of Common Stock otherwise provided for herein) resulting in a reclassification to or change in the terms of securities issuable upon exercise of this Warrant (a “**Reorganization**”), or a merger or consolidation of the Company with another corporation, association, partnership, organization, business, individual, government or political subdivision thereof or a governmental agency (a “**Person**” or the “**Persons**”) (other than a merger with another Person in which the Company is a continuing corporation and which does not result in any reclassification or change in the terms of securities issuable upon exercise of this Warrant or a merger effected exclusively for the purpose of changing the domicile of the Company) (a “**Merger**”), then, as a part of such Reorganization or Merger, lawful provision and adjustment shall be made so that the Holder shall thereafter be entitled to receive, upon exercise of this Warrant, the number of shares of stock or any other equity or debt securities or property receivable upon such Reorganization or Merger by a holder of the number of shares of Common Stock which might have been purchased upon exercise of this Warrant immediately prior to such Reorganization or Merger. In any such case, appropriate adjustment shall be made in the application of the provisions of this Warrant with respect to the rights and interests of the Holder after the Reorganization or Merger to the end that the provisions of this Warrant (including adjustment of the Exercise Price then in effect and the number of Warrant Shares) shall be applicable after that event, as near as reasonably may be, in relation to any shares of stock, securities, property or other assets thereafter deliverable upon exercise of this Warrant. The provisions of this Section 4.1 shall similarly apply to successive Reorganizations and/or Mergers.

4.2 Splits and Subdivisions; Dividends. In the event the Company should at any time or from time to time effectuate a split or subdivision of the outstanding shares of Common Stock or pay a dividend in or make a distribution payable in additional shares of Common Stock or other securities, or rights convertible into, or entitling the holder thereof to receive, directly or indirectly, additional shares of Common Stock (hereinafter referred to as “**Common Stock Equivalents**”) without payment of any consideration by such holder for the additional shares of Common Stock or Common Stock Equivalents (including the additional shares of Common Stock issuable upon conversion or exercise thereof), then, as of the applicable record date (or the date of such distribution, split or subdivision if no record date is fixed), the per share Exercise Price shall be appropriately decreased and the number of Warrant Shares shall be appropriately increased in proportion to such increase (or potential increase) of outstanding shares; provided, however, that no adjustment shall be made in the event the split, subdivision, dividend or distribution is not effectuated.

4.3 Combination of Shares. If the number of shares of Common Stock outstanding at any time after the date hereof is decreased by a combination of the outstanding shares of Common Stock, the per share Exercise Price shall be appropriately increased and the number of shares of Warrant Shares shall be appropriately decreased in proportion to such decrease in outstanding shares.

4.4 Adjustments for Other Distributions. In the event the Company shall declare a distribution payable in securities of other Persons, evidences of indebtedness issued by the Company or other Persons, assets (excluding cash dividends or distributions to the holders of Common Stock paid out of current or retained earnings and declared by the Company’s Board of Directors) or options or rights not referred to in Sections 4.2 or 4.3 then, in each such case for the purpose of this Section 4.4, upon exercise of this Warrant, the Holder shall be entitled to a proportionate share of any such distribution as though the Holder was the actual record holder of the number of Warrant Shares as of the record date fixed for the determination of the holders of Common Stock of the Company entitled to receive such distribution.

5 . No Impairment. The Company will not, by amendment of its certificate of incorporation or by-laws or through any consolidation, merger, reorganization, transfer of assets, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all of the terms and in the taking of all actions necessary or appropriate in order to protect the rights of the Holder against impairment.

6 . Notice as to Adjustments. With respect to each adjustment pursuant to Section 4 of this Warrant, the Company, at its expense, will promptly compute the adjustment or re-adjustment in accordance with the terms of this Warrant and furnish the Holder with a certificate certified and confirmed by the Secretary or Chief Financial Officer of the Company setting forth, in reasonable detail, the event requiring the adjustment or re-adjustment and the amount of such adjustment or re-adjustment, the method of calculation thereof and the facts upon which the adjustment or re-adjustment is based, and the Exercise Price and the number of Warrant Shares or other securities purchasable hereunder after giving effect to such adjustment or re-adjustment, which report shall be mailed by first class mail, postage prepaid to the Holder.

7 . Reservation of Shares. The Company shall, solely for the purpose of effecting the exercise of this Warrant, at all times during the term of this Warrant, reserve and keep available out of its authorized shares of Common Stock, free from all taxes, liens and charges with respect to the issue thereof and not subject to preemptive rights of shareholders of the Company, such number of its shares of Common Stock as shall from time to time be sufficient to effect in full the exercise of this Warrant. If at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect in full the exercise of this Warrant, in addition to such other remedies as shall be available to Holder, the Company will promptly take such corporate action as may, in the opinion of its counsel, be necessary to increase the number of authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including without limitation, using its Reasonable Commercial Efforts (as defined in Section 14 hereof) to obtain the requisite shareholder approval necessary to increase the number of authorized shares of Common Stock. The Company hereby represents and warrants that all shares of Common Stock issuable upon proper exercise of this Warrant shall be duly authorized and, when issued and paid for upon proper exercise, shall be validly issued, fully paid and nonassessable.

8. Registration and Listing.

8 . 1 Definition of Registrable Securities; Majority. As used herein, the term “**Registrable Securities**” means any shares of Common Stock issuable upon the exercise of this Warrant until the date (if any) on which such shares shall have been transferred or exchanged and new certificates for them not bearing a legend restricting further transfer shall have been delivered by the Company and subsequent disposition of the shares shall not require registration or qualification under the Securities Act or any similar state law then in force. For purposes of this Warrant, the term “**Majority Holders**” shall mean in excess of fifty percent (50%) of the then outstanding Warrant Shares.

## 8.2 Demand Registration Rights.

(a) The Company, upon written demand (“**Demand Notice**”) of the Majority Holders, agrees to register on one occasion all of the Registrable Securities (a “**Demand Right**”). On such occasion, the Company will file a registration statement or a post-effective amendment to the Registration Statement covering the Registrable Securities within forty-five (45) days after receipt of a Demand Notice and use its Reasonable Commercial Efforts to have such registration statement or post-effective amendment declared effective as soon as possible thereafter; provided, however, that the Company shall not be required to comply with a Demand Notice if the Company has filed a registration statement with respect to which the Holder is entitled to piggyback registration rights pursuant to Section 8.3 hereof and either: (i) the Holder has elected to participate in the offering covered by such registration statement or (ii) if such registration statement relates to an underwritten primary offering of securities of the Company, until the offering covered by such registration statement has been withdrawn or until thirty (30) days after such offering is consummated. The demand for registration may be made at any time during a period of four years beginning one (1) year from the Base Date. The Company covenants and agrees to give written notice of its receipt of any Demand Notice to all other registered Holders of the Warrants and/or the Registrable Securities within ten days from the date of the receipt of any such Demand Notice.

(b) The Company shall bear all fees and expenses attendant to registering the Registrable Securities pursuant to Section 8.2(a), but the Holders shall pay any and all underwriting commissions and the expenses of any legal counsel selected by the Holders to represent them in connection with the sale of the Registrable Securities. The Company agrees to use its Reasonable Commercial Efforts to qualify or register the Registrable Securities in such states as are reasonably requested by the Majority Holder(s); provided, however, that in no event shall the Company be required to register the Registrable Securities in a state in which such registration would cause (i) the Company to be obligated to register, license or qualify to do business in such state, submit to general service of process in such state or would subject the Company to taxation as a foreign corporation doing business in such jurisdiction or (ii) the principal stockholders of the Company to be obligated to escrow their shares of capital stock of the Company. The Company shall cause any registration statement or post-effective amendment filed pursuant to the Demand Right granted under Section 8.2(a) to remain effective for a period of nine consecutive months from the effective date of such registration statement or post-effective amendment. The Holders shall only use the prospectuses provided by the Company to sell the Registrable Securities covered by such registration statement, and will immediately cease to use any prospectus furnished by the Company if the Company advises the Holder that such prospectus may no longer be used due to a material misstatement or omission.

## 8.3 Incidental Registration Rights.

(a) If the Company, for a period of six (6) years commencing one (1) year after the Base Date, proposes to register any of its securities under the Securities Act (other than in connection with a transaction contemplated by Rule 145(a) promulgated under the Securities Act or pursuant to registration on Form S-4 or S-8 or any successor forms) whether for its own account or for the account of any holder or holders of its shares other than Registrable Securities (any shares of such holder or holders (but not those of the Company and not Registrable Securities) with respect to any registration are referred to herein as, “**Other Shares**”), the Company shall at each such time give prompt (but not less than thirty (30) days prior to the anticipated effectiveness thereof) written notice to the holders of Registrable Securities of its intention to do so. The holders of Registrable Securities shall exercise the “piggy-back” rights provided herein by giving written notice within ten (10) days after the receipt of any such notice (which request shall specify the Registrable Securities intended to be disposed of by such holder). Except as set forth in Section 8.3(b), the Company will use its Reasonable Commercial Efforts to effect the registration under the Securities Act of all of the Registrable Securities which the Company has been so requested to register by such holder, to the extent required to permit the disposition of the Registrable Securities so to be registered, by inclusion of such Registrable Securities in the registration statement which covers the securities which the Company proposes to register. The Company will pay all Registration Expenses in connection with each registration of Registrable Securities pursuant to this Section 8.3.

(b) If the Company at any time proposes to register any of its securities under the Securities Act as contemplated by this Section 8.3 and such securities are to be distributed by or through one or more underwriters, the Company will, if requested by a holder of Registrable Securities, use its Reasonable Commercial Efforts to arrange for such underwriters to include all the Registrable Securities to be offered and sold by such holder among the securities to be distributed by such underwriters, provided that if the managing underwriter of such underwritten offering shall inform the Company by letter of its belief that inclusion in such registration statement and/or distribution of all or a specified number of such securities proposed to be distributed by such underwriters would interfere with the successful marketing of the securities being distributed by such underwriters (such letter to state the basis of such belief and the approximate number of such Registrable Securities, such Other Shares and shares held by the Company proposed so to be registered which may be distributed without such effect), then the Company may, upon written notice to such holder, the other holders of Registrable Securities, and holders of such Other Shares, reduce pro rata in accordance with the number of shares of Common Stock desired to be included in such registration statement and/or distribution (if and to the extent stated by such managing underwriter to be necessary to eliminate such effect) the number of such Registrable Securities and Other Shares the registration and/or distribution of which shall have been requested by each holder thereof so that the resulting aggregate number of such Registrable Securities and Other Shares so included in such registration and/or distribution, together with the number of securities to be included in such registration and/or distribution for the account of the Company, shall be equal to the number of shares stated in such managing underwriter's letter.

8 . 4 Registration Procedures. Whenever the holders of Registrable Securities have properly requested that any Registrable Securities be registered pursuant to the terms of this Warrant, the Company shall use its Reasonable Commercial Efforts to effect the registration for the sale of such Registrable Securities in accordance with the intended method of disposition thereof, and pursuant thereto the Company shall as expeditiously as possible:

(a) prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its Reasonable Commercial Efforts to cause such registration statement to become effective;

(b) notify such holders of the effectiveness of each registration statement filed hereunder and prepare and file with the SEC such amendments and supplements to such registration statement and the prospectus used in connection therewith as may be necessary to (i) keep such registration statement effective and the prospectus included therein usable for a period commencing on the date that such registration statement is initially declared effective by the SEC and ending on the earlier of: (A) the date when all Registrable Securities covered by such registration statement have been sold pursuant to the registration statement or cease to be Registrable Securities, or (B) nine months from the effective date of the registration statement and (ii) comply with the provisions of the Securities Act with respect to the disposition of all securities covered by such registration statement during such period in accordance with the intended methods of disposition by the sellers thereof set forth in such registration statement;

(c) furnish to such holders such number of copies of such registration statement, each amendment and supplement thereto, the prospectus included in such registration statement (including each preliminary prospectus) and such other documents as such seller may reasonably request in order to facilitate the disposition of the Registrable Securities owned by such holders;

(d) use its Reasonable Commercial Efforts to register or qualify such Registrable Securities under such other securities or blue sky laws of such jurisdictions as such holders reasonably request and do any and all other acts and things which may be reasonably necessary or advisable to enable such holders to consummate the disposition in such jurisdictions of the Registrable Securities owned by such holders; provided, however, that the Company shall not be required to: (i) qualify generally to do business in any jurisdiction where it would not otherwise be required to qualify but for this subparagraph; (ii) subject itself to taxation in any such jurisdiction; or (iii) consent to general service of process in any such jurisdiction;

(e) notify such holders, at any time when a prospectus relating thereto is required to be delivered under the Securities Act, of the happening of any event as a result of which the prospectus included in such registration statement contains an untrue statement of a material fact or omits any material fact necessary to make the statements therein, in light of the circumstances in which they are made, not materially misleading, and, at the reasonable request of such holders, the Company shall prepare a supplement or amendment to such prospectus so that, as thereafter delivered to the purchasers of such Registrable Securities, such prospectus shall not contain an untrue statement of a material fact or omit to state any material fact necessary to make the statements therein, in light of the circumstances in which they are made, not materially misleading;

(f) provide a transfer agent and registrar for all such Registrable Securities not later than the effective date of such registration statement;

(g) make available for inspection by any underwriter participating in any disposition pursuant to such registration statement, and any attorney, accountant or other agent retained by any such underwriter, all financial and other records, pertinent corporate documents and properties of the Company, and cause the Company's officers, directors, managers, employees and independent accountants to supply all information reasonably requested by any such underwriter, attorney, accountant or agent in connection with such registration statement;

(h) otherwise use its Reasonable Commercial Efforts to comply with all applicable rules and regulations of the SEC, and make available to its security holders, as soon as reasonably practicable, an earnings statement of the Company, which earnings statement shall satisfy the provisions of Section 11(a) of the Securities Act and, at the option of the Company, Rule 158 thereunder;

(i) in the event of the issuance of any stop order suspending the effectiveness of a registration statement, or of any order suspending or preventing the use of any related prospectus or suspending the qualification of any Registrable Securities included in such registration statement for sale in any jurisdiction, the Company shall use its Reasonable Commercial Efforts promptly to obtain the withdrawal of such order; and

(j) if the offering is underwritten, use its Reasonable Commercial Efforts to furnish on the date that Registrable Securities are delivered to the underwriters for sale pursuant to such registration, an opinion dated such date of counsel representing the Company for the purposes of such registration, addressed to the underwriters covering such issues as are reasonably required by such underwriters.

8 . 5 Listing. The Company shall secure the listing of the Common Stock underlying this Warrant upon each national securities exchange or automated quotation system upon which shares of Common Stock are then listed or quoted (subject to official notice of issuance) and shall maintain such listing of shares of Common Stock. The Company shall at all times comply in all material respects with the Company's reporting, filing and other obligations under the by-laws or rules of The NASDAQ Stock Market (or such other national securities exchange or market on which the Common Stock may then be listed, as applicable).

8.6 Expenses. The Company shall pay all Registration Expenses relating to the registration and listing obligations set forth in this Section 8. For purposes of this Warrant, the term "**Registration Expenses**" means: (a) all registration, filing and FINRA fees, (b) all reasonable fees and expenses of complying with securities or blue sky laws, (c) all word processing, duplicating and printing expenses, (d) the fees and disbursements of counsel for the Company and of its independent public accountants, including the expenses of any special audits or "cold comfort" letters required by or incident to such performance and compliance, (e) premiums and other costs of policies of insurance (if any) against liabilities arising out of the public offering of the Registrable Securities being registered if the Company desires such insurance, if any, and (f) fees and disbursements of one counsel for the selling holders of Registrable Securities; provided however, that, in any case where Registration Expenses are not to be borne by the Company, such expenses shall not include (and such expenses shall be borne by the Company): (i) salaries of Company personnel or general overhead expenses of the Company, (ii) auditing fees, or (iii) other expenses for the preparation of financial statements or other data, to the extent that any of the foregoing either is normally prepared by the Company in the ordinary course of its business or would have been incurred by the Company had no public offering taken place. Registration Expenses shall not include any underwriting discounts and commissions which may be incurred in the sale of any Registrable Securities and transfer taxes of the selling holders of Registrable Securities.

8.7 Information Provided by Holders. Any holder of Registrable Securities included in any registration shall furnish to the Company such information as the Company may reasonably request in writing, including, but not limited to, a completed and executed questionnaire requesting information customarily sought of selling security holders, to enable the Company to comply with the provisions hereof in connection with any registration referred to in this Warrant. The Holder agrees to suspend all sales of Registrable Securities pursuant to a registration statement filed under Section 8.3 in the event the Company notifies Holder pursuant to Section 8.4(e) that the prospectus relating thereto is no longer current and will not resume sales under such registration statement until advised by the Company that the prospectus has been appropriately supplemented or amended.

8 . 8 FINRA Public Offering System Filings. In the event that a registration statement covering the Registrable Securities is filed, within one (1) Business Day of the filing of such registration statement, the Company will prepare and file the selling stockholder resale offering described in such registration statement for review by FINRA via the FINRA's Public Offering System filing system ("**Public Offering System Filing**") for the purpose of having the prospectus contained within such registration statement treated as a "base prospectus" in connection with such resale offering. The Company will use its Reasonable Commercial Efforts to have the Public Offering System Filing approved by FINRA within thirty (30) days of such filing date. The Company shall bear all expenses of the Public Offering System Filing, including fees and expenses of one counsel or other advisor to the Holder. In all circumstances, the Company shall pay for all FINRA filing fees associated with the Public Offering System Filing.



8 . 9 Effectiveness Period. The Company shall use its Reasonable Commercial Efforts to keep each registration statement contemplated hereunder continuously effective under the Securities Act until the date which is the earlier date of when (i) all Registrable Securities covered by such Registration Statement have been sold; (ii) all Registrable Securities covered by such Registration Statement may be sold immediately without registration under the Securities Act and without volume restrictions pursuant to Rule 144 under the Securities Act, as determined by the counsel to the Company pursuant to a written opinion letter to such effect, addressed and reasonably acceptable to the Company's transfer agent and the affected holders of Registrable Securities; or (iii) nine months from the effective date of such registration statement.

8 . 10 Net Cash Settlement. Notwithstanding anything herein to the contrary, in no event will the Holder hereof be entitled to receive a net-cash settlement as liquidated damages in lieu of physical settlement in shares of Common Stock, regardless of whether the Common Stock underlying this Warrant is registered pursuant to an effective registration statement; provided, however, that the foregoing will not preclude the Holder from seeking other remedies at law or equity for breaches by the Company of its registration obligations hereunder.

9. Restrictions on Transfer.

9 . 1 Restrictive Legends. This Warrant and each Warrant issued upon transfer or in substitution for this Warrant pursuant to Section 10 hereof, each certificate for Common Stock issued upon the exercise of the Warrant and each certificate issued upon the transfer of any such Common Stock shall be transferable only upon satisfaction of the conditions specified in this Section 9. Each of the foregoing securities shall be stamped or otherwise imprinted with a legend reflecting the restrictions on transfer set forth herein and any restrictions required under the Securities Act or other applicable securities laws.

9 . 2 Notice of Proposed Transfer. Prior to any transfer of any securities which are not registered under an effective registration statement under the Securities Act ("**Restricted Securities**"), which transfer may only occur if there is an exemption from the registration provisions of the Securities Act and all other applicable securities laws, the Holder will give written notice to the Company of the Holder's intention to effect a transfer (and shall describe the manner and circumstances of the proposed transfer). The following provisions shall apply to any proposed transfer of Restricted Securities:

(i) If in the opinion of counsel for the Holder reasonably satisfactory to the Company the proposed transfer may be effected without registration of the Restricted Securities under the Securities Act (which opinion shall state in detail the basis of the legal conclusions reached therein), the Holder shall thereupon be entitled to transfer the Restricted Securities in accordance with the terms of the notice delivered by the Holder to the Company. Each certificate representing the Restricted Securities issued upon or in connection with any transfer shall bear the restrictive legends required by Section 9.1 hereof.

(i i) If the opinion called for in (i) above is not delivered, the Holder shall not be entitled to transfer the Restricted Securities until either: (x) receipt by the Company of a further notice from such Holder pursuant to the foregoing provisions of this Section 9.2 and fulfillment of the provisions of clause (i) above, or (y) such Restricted Securities have been effectively registered under the Securities Act.

9 . 3 Certain Other Transfer Restrictions. Notwithstanding any other provision of this Warrant: (i) prior to the Exercise Date, this Warrant or the Restricted Securities thereunder may only be transferred or assigned to the persons permitted under FINRA Rule 5110(g), and (ii) subject at all times to FINRA Rule 5110(g), no opinion of counsel shall be necessary for a transfer of Restricted Securities by the holder thereof to any Person employed by or owning equity in the Holder, if the transferee agrees in writing to be subject to the terms hereof to the same extent as if the transferee were the original purchaser hereof and such transfer is permitted under applicable securities laws.

9.4 Termination of Restrictions. Except as set forth in Section 9.3 hereof and subject at all times to FINRA Rule 5110(g), the restrictions imposed by this Section 9 upon the transferability of Restricted Securities shall cease and terminate as to any particular Restricted Securities: (a) which shall have been effectively registered under the Securities Act, or (b) when, in the opinion of counsel for the Company, such restrictions are no longer required in order to insure compliance with the Securities Act or Section 10 hereof. Whenever such restrictions shall cease and terminate as to any Restricted Securities, the Holder thereof shall be entitled to receive from the Company, without expense (other than applicable transfer taxes, if any), new securities of like tenor not bearing the applicable legends required by Section 9.1 hereof.

10. Ownership, Transfer, Sale and Substitution of Warrant.

10.1 Ownership of Warrant. The Company may treat any Person in whose name this Warrant is registered in the Warrant Register maintained pursuant to Section 10.2(b) hereof as the owner and holder thereof for all purposes, notwithstanding any notice to the contrary, except that, if and when any Warrant is properly assigned in blank, the Company may (but shall not be obligated to) treat the bearer thereof as the owner of such Warrant for all purposes, notwithstanding any notice to the contrary. Subject to Sections 9 and 10 hereof, this Warrant, if properly assigned, may be exercised by a new holder without a new Warrant first having been issued.

10.2 Office; Exchange of Warrant.

(a) The Company will maintain its principal office at the location identified in the prospectus relating to the Offering or at such other offices as set forth in the Company's most current filing (as of the date notice is to be given) under the Securities Exchange Act of 1934, as amended, or as the Company otherwise notifies the Holder.

(b) The Company shall cause to be kept at its office maintained pursuant to Section 10.2(a) hereof a Warrant Register for the registration and transfer of the Warrant. The name and address of the holder of the Warrant, the transfers thereof and the name and address of the transferee of the Warrant shall be registered in such Warrant Register. The Person in whose name the Warrant shall be so registered shall be deemed and treated as the owner and holder thereof for all purposes of this Warrant, and the Company shall not be affected by any notice or knowledge to the contrary.

(c) Upon the surrender of this Warrant, properly endorsed, for registration of transfer or for exchange at the office of the Company maintained pursuant to Section 10.2(a) hereof, the Company at its expense will (subject to compliance with Section 9 hereof, if applicable) execute and deliver to or upon the order of the Holder thereof a new Warrant of like tenor, in the name of such holder or as such holder (upon payment by such holder of any applicable transfer taxes) may direct, calling in the aggregate on the face thereof for the number of shares of Common Stock called for on the face of the Warrant so surrendered (after giving effect to any previous adjustment(s) to the number of Warrant Shares).

10.3 Replacement of Warrant. Upon receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of any such loss, theft or destruction of this Warrant, upon delivery of indemnity reasonably satisfactory to the Company in form and amount or, in the case of any mutilation, upon surrender of this Warrant for cancellation at the office of the Company maintained pursuant to Section 10.2(a) hereof, the Company will execute and deliver, in lieu thereof, a new Warrant of like tenor and dated the date hereof.

10.4 Opinions. In connection with the sale of the Warrant Shares by Holder, the Company agrees to cooperate with the Holder, and at the Company's expense, to have its counsel provide any legal opinions required to remove the restrictive legends from the Warrant Shares in connection with a sale, transfer or legend removal request of Holder.

11. No Rights or Liabilities as Stockholder. No Holder shall be entitled to vote or be deemed the holder of any equity securities which may at any time be issuable on the exercise hereof, nor shall anything contained herein be construed to confer upon the Holder, as such, any of the rights of a stockholder of the Company or any right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof, or to give or withhold consent to any corporate action (whether upon any recapitalization, issuance of stock, reclassification of stock, change of par value, consolidation, merger, conveyance, or otherwise) or to receive notice of meetings until the Warrant shall have been exercised and the shares of Common Stock purchasable upon the exercise hereof shall have become deliverable, as provided herein.

12. Notices. Any notice or other communication in connection with this Warrant shall be given in writing and directed to the parties hereto as follows: (a) if to the Holder, at the address of the holder in the warrant register maintained pursuant to Section 10 hereof, or (b) if to the Company, to the attention of its Chief Executive Officer at its office maintained pursuant to Section 10.2(a) hereof; *provided*, that the exercise of the Warrant shall also be effected in the manner provided in Section 3 hereof. Notices shall be deemed properly delivered and received when delivered to the notice party (i) if personally delivered, upon receipt or refusal to accept delivery, (ii) if sent via facsimile, upon mechanical confirmation of successful transmission thereof generated by the sending telecopy machine, (iii) if sent by a commercial overnight courier for delivery on the next Business Day, on the first Business Day after deposit with such courier service, or (iv) if sent by registered or certified mail, five (5) Business Days after deposit thereof in the U.S. mail.

13. Payment of Taxes. The Company will pay all documentary stamp taxes attributable to the issuance of shares of Common Stock underlying this Warrant upon exercise of this Warrant; *provided, however*, that the Company shall not be required to pay any tax which may be payable in respect of any transfer involved in the transfer or registration of this Warrant or any certificate for shares of Common Stock underlying this Warrant in a name other than that of the Holder. The Holder is responsible for all other tax liability that may arise as a result of holding or transferring this Warrant or receiving shares of Common Stock underlying this Warrant upon exercise hereof.

14. Miscellaneous. This Warrant and any term hereof may be changed, waived, discharged or terminated only by an instrument in writing signed by the party against which enforcement of the change, waiver, discharge or termination is sought. This Warrant shall be construed and enforced in accordance with and governed by the laws of the State of New York. Each of the parties consents to the exclusive jurisdiction of the Federal or state courts whose districts encompass any part of the County of New York located in the City of New York, New York in connection with any dispute arising under this Agreement and hereby waives, to the maximum extent permitted by law, any objection, including any objection based on *forum non conveniens*, to the bringing of any such proceeding in such jurisdictions. Each party to this Agreement irrevocably consents to the service of process in any such proceeding by any manner permitted by law. The section headings in this Warrant are for purposes of convenience only and shall not constitute a part hereof. When used herein, the term "**Reasonable Commercial Efforts**" means, with respect to the applicable obligation of the Company, reasonable commercial efforts for similarly situated, publicly-traded companies.

(Signature on Following Page)

IN WITNESS WHEREOF, the Company has caused this Underwriter Warrant to be duly executed as of the date first above written.

**AQUA METALS, INC.**

By:

\_\_\_\_\_  
Name:  
Title:

**EXHIBIT A**  
**FORM OF EXERCISE NOTICE**  
[To be executed only upon exercise of Warrant]

To AQUA METALS, INC.:

The undersigned registered holder of the within Warrant hereby irrevocably exercises the Warrant pursuant to Section 3.1 of the Warrant with respect to [\_\_\_\_\_] Warrant Shares, at an exercise price of \$[\_\_\_\_\_] per share, and requests that the certificates for such Warrant Shares be issued, subject to Sections 9 and 10, in the name of and delivered to:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The undersigned is hereby making payment for the Warrant Shares in the following manner:  
[check one]

- by cash in accordance with Section 3.1(b) of the Warrant
- via cashless exercise in accordance with Section 3.1(c) of the Warrant in the following manner:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The undersigned hereby represents and warrants that it is, and has been since its acquisition of the Warrant, the record and beneficial owner of the Warrant.

Dated: \_\_\_\_\_

\_\_\_\_\_  
Print or Type Name

\_\_\_\_\_  
(Signature must conform in all respects to name of holder as specified on the face of Warrant)

\_\_\_\_\_  
(Street Address)

\_\_\_\_\_  
(City) (State) (Zip Code)

**EXHIBIT B**  
**FORM OF ASSIGNMENT**

[To be executed only upon transfer of Warrant]

For value received, the undersigned registered holder of the within Warrant hereby sells, assigns and transfers unto \_\_\_\_\_  
[include name and addresses] the rights represented by the Warrant to purchase \_\_\_\_\_ shares of Common Stock of AQUA METALS,  
INC. to which the Warrant relates, and appoints \_\_\_\_\_ Attorney to make such transfer on the books of AQUA METALS, INC.  
maintained for the purpose, with full power of substitution in the premises.

Dated:

\_\_\_\_\_  
(Signature must conform in all respects to name of  
holder as specified on the face of Warrant)

\_\_\_\_\_  
(Street Address)

\_\_\_\_\_  
(City) (State) (Zip Code)

Signed in the presence of:

\_\_\_\_\_  
(Signature of Transferee)

\_\_\_\_\_  
(Street Address)

\_\_\_\_\_  
(City) (State) (Zip Code)

Signed in the presence of: \_\_\_\_\_

**GREENBERG TRAUIG, LLP**  
**3161 Michelson Drive, Suite 1000**  
**Irvine, California 92612**

July 20, 2015

Aqua Metals, Inc.  
501 23rd Avenue  
Oakland, California 94606

Re: Registration Statement on Form S-1

Ladies and Gentlemen:

We have acted as counsel to Aqua Metals, Inc., a Delaware corporation (the “**Company**”), in connection with the Registration Statement on Form S-1 (File No. 333-204826) (the “**Registration Statement**”) filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended, for the registration of (i) up to 6,900,000 shares (the “**Common Shares**”) of the Company’s \$0.001 par value common stock (“**Common Stock**”); (ii) a warrant to purchase up to 690,000 shares of Common Stock to be issued to the underwriters (the “**Underwriters’ Warrant**”); and (iii) up to 690,000 shares of Common Stock underlying the Underwriters’ Warrant (the “**Underlying Shares**”).

You have requested our opinion as to the matters set forth below in connection with the Registration Statement. For purposes of rendering this opinion, we have examined the Registration Statement, forms of the First Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws of the Company currently in effect, the Underwriters’ Warrant, and the corporate action of the Company that provides for the issuance of the Common Shares and execution of the Underwriters’ Warrant, and we have made such other investigation as we have deemed appropriate. We have examined and relied upon certificates of public officials and, as to certain matters of fact that are material to our opinion, we have also relied on a certificate of an officer of the Company. We have not independently verified the matters set forth in such certificates.

We express no opinion herein as to the laws of any state or jurisdiction other than the General Corporation Law of the State of Delaware and the federal laws of the United States of America.

Based upon and subject to the foregoing, it is our opinion that the Common Shares are duly authorized for issuance by the Company and, when issued and paid for as described in the Registration Statement, will be validly issued, fully paid and non-assessable.

Based upon and subject to the foregoing, it is our opinion that the Underwriters’ Warrant has been duly authorized for issuance by the Company and, when issued in conformity with and pursuant to the Registration Statement, will be validly issued, fully paid and non-assessable.

Based upon and subject to the foregoing, it is our opinion that the Underlying Shares have been duly authorized for issuance by the Company and, upon exercise and payment of the exercise price therefor in accordance with the terms of the Underwriters’ Warrant, will be validly issued, fully paid and non-assessable.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to the reference to our name under the caption “Legal Matters” in the prospectus made part of the Registration Statement.

Very truly yours,

/s/ GREENBERG TRAUIG, LLP

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CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the inclusion in this Amendment No. 2 to Registration Statement of Aqua Metals, Inc. on Form S-1 of our report dated May 8, 2015 (except for the matters disclosed in Note 10, including the reverse stock split, dated from June 9, 2015 through June 30, 2015, for which the date is June 30, 2015), with respect to our audit of the consolidated financial statements of Aqua Metals, Inc. as of December 31, 2014 and for the period from June 20, 2014 (Inception) through December 31, 2014, which report appears in the Prospectus, which is part of this Registration Statement. We also consent to the reference to our Firm under the heading "Experts" in such Prospectus.

/s/ Armanino LLP

San Ramon, California  
July 20, 2015

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