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

FORM 10-Q

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

For the Quarterly Period Ended June 30, 2020

OR

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

For the transition period from to .

Commission file number: 001-37515

Aqua Metals, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**47-1169572**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification no.)

2500 Peru Dr.
McCarran, Nevada 89437
(Address of principal executive offices, including zip code)

(775) 525-1936
(Registrant's telephone number, including area code)

Not Applicable
(Former name, former address and former fiscal year, if changed since last report)

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

Title of each class of stock:	Trading symbol	Name of each exchange on which registered:
Common Stock	AQMS	The Nasdaq Capital Market

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company (as defined in Rule 12b-2 of the Act):

Large accelerated filer	☐	Accelerated filer ☒
Non-accelerated filer	☐	Smaller reporting company ☒
		Emerging Growth Company ☒

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

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

As of July 27, 2020, there were 60,946,501 outstanding shares of the common stock of Aqua Metals, Inc.

PART I - FINANCIAL INFORMATION

Item 1. Financial Statements

AQUA METALS, INC.
Condensed Consolidated Balance Sheets
(in thousands, except share and per share amounts)

	June 30, 2020	December 31, 2019
	(unaudited)	(Note 2)
ASSETS		
Current assets		
Cash and cash equivalents	$ 4,776	$ 7,575
Accounts receivable	—	244
Insurance proceeds receivable	4,946	17,446
Inventory	1,209	1,257
Prepaid expenses and other current assets	248	981
Total current assets	11,179	27,503
Non-current assets		
Property and equipment, net	37,614	37,643
Intellectual property, net	909	999
Other assets	7,923	3,309
Total non-current assets	46,446	41,951
Total assets	$ 57,625	$ 69,454
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable	$ 1,883	$ 4,829
Accrued expenses	2,174	4,133
Lease liability, current portion	585	552
Notes payable, current portion	485	296
Total current liabilities	5,127	9,810
Lease liability, non-current portion	561	861
Asset retirement obligation	814	790
Notes payable, non-current portion	8,408	8,404
Total liabilities	14,910	19,865
Commitments and contingencies		
Stockholders' equity		
Common stock; $0.001 par value; 100,000,000 shares authorized; 60,274,096 and 57,997,780 shares issued and outstanding as of June 30, 2020 and December 31, 2019, respectively	60	58
Additional paid-in capital	190,956	189,422
Accumulated deficit	(148,301)	(139,891)
Total stockholders' equity	42,715	49,589
Total liabilities and stockholders' equity	$ 57,625	$ 69,454

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

AQUA METALS, INC.
Condensed Consolidated Statements of Operations
(in thousands, except share and per share amounts)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Product sales	$ —	$ 1,483	$ 18	$ 1,920
Operating cost and expense				
Cost of product sales	1,306	7,185	2,760	11,866
Research and development cost	217	338	459	958
General and administrative expense	2,245	4,335	4,630	8,351
Total operating expense	3,768	11,858	7,849	21,175
Loss from operations	(3,768)	(10,375)	(7,831)	(19,255)
Other income and (expense)				
Insurance proceeds net of related expenses	(52)	—	(255)	—
Interest expense	(164)	(203)	(347)	(3,092)
Interest and other income	3	77	25	140
Total other expense, net	(213)	(126)	(577)	(2,952)
Loss before income tax expense	(3,981)	(10,501)	(8,408)	(22,207)
Income tax expense	(2)	—	(2)	(2)
Net loss	$ (3,983)	$ (10,501)	$ (8,410)	$ (22,209)
Weighted average shares outstanding, basic and diluted	60,136,374	50,757,448	59,859,493	47,441,219
Basic and diluted net loss per share	$ (0.07)	$ (0.21)	$ (0.14)	$ (0.47)

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

AQUA METALS, INC.
Condensed Consolidated Statements of Stockholders' Equity (Deficit)
(Unaudited)
(in thousands, except share amounts)

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Equity (Deficit)
	Shares	Amount			
Balances, March 31, 2020	59,836,897	$ 60	$ 190,402	$ (144,318)	$ 46,144
Stock-based compensation	—	—	554	—	554
Common stock issued to employees, includes RSUs vesting	437,199	—	—	—	—
Common stock issued for consulting services	—	—	—	—	—
Net loss	—	—	—	(3,983)	(3,983)
Balances, June 30, 2020	60,274,096	$ 60	$ 190,956	$ (148,301)	$ 42,715
Balances, December 31, 2019	57,997,780	$ 58	$ 189,422	$ (139,891)	$ 49,589
Stock-based compensation	—	—	1,510	—	1,510
Common stock issued to employees, includes RSUs vesting	2,253,238	2	—	—	2
Common stock issued for consulting services	23,078	—	24	—	24
Net loss	—	—	—	(8,410)	(8,410)
Balances, June 30, 2020	60,274,096	$ 60	$ 190,956	$ (148,301)	$ 42,715
Balances, March 31, 2019	44,727,697	$ 45	$ 157,037	$ (106,804)	$ 50,278
Stock-based compensation	—	—	930	—	930
Warrants related to Veolia agreement	—	—	1,734	—	1,734
Common stock issued upon RSU vesting	39,350	—	—	—	—
Common stock issued for consulting services	1,122,829	1	1,856	—	1,857
Common stock issued in May 2019 public offering, net of $1,683 offering costs	11,000,000	11	20,306	—	20,317
Net loss	—	—	—	(10,501)	(10,501)
Balances, June 30, 2019	56,889,876	$ 57	$ 181,863	$ (117,305)	$ 64,615
Balances, December 31, 2018	38,932,437	$ 39	$ 145,147	$ (95,096)	$ 50,090
Stock-based compensation	—	—	1,998	—	1,998
Warrants related to Veolia agreement	—	—	2,312	—	2,312
Common stock issued upon RSU vesting	357,168	—	—	—	—
Common stock issued for consulting services	1,425,271	2	3,042	—	3,044
Common stock issued in January 2019 public offering, net of $739 offering costs	5,175,000	5	9,058	—	9,063
Common stock issued in May 2019 public offering, net of $1,683 offering costs	11,000,000	11	20,306	—	20,317
Net loss	—	—	—	(22,209)	(22,209)
Balances, June 30, 2019	56,889,876	$ 57	$ 181,863	$ (117,305)	$ 64,615

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

AQUA METALS, INC.
Condensed Consolidated Statements of Cash Flows
(Unaudited)
(in thousands)

	Six Months Ended June 30,	
	2020	**2019**
Cash flows from operating activities:		
Net loss	$ (8,410)	$ (22,209)
Reconciliation of net loss to net cash used in operating activities		
Depreciation	1,236	1,937
Amortization of intellectual property	90	92
Accretion of asset retirement obligation	24	23
Fair value of common stock issued for consulting services	24	3,044
Stock-based compensation	1,510	1,998
Warrant expense	—	2,312
Amortization of deferred financing costs	18	38
Non-cash convertible note interest expense	—	2,556
Non-cash interest expense	—	118
Loss on disposal of Ebonex asset	—	90
Loss on disposal of equipment	—	79
Changes in operating assets and liabilities		
Accounts receivable	244	(288)
Inventory	49	(977)
Prepaid expenses and other current assets	733	(210)
Accounts payable	(1,953)	2,453
Accrued expenses	(1,671)	(2,605)
Deferred rent	—	(35)
Other assets and liabilities	(217)	(247)
Net cash used in operating activities	(8,323)	(11,831)
Cash flows from investing activities:		
Purchases of property and equipment	(2,239)	(3,198)
Equipment deposits and other assets	(36)	(1,101)
Insurance proceeds	7,625	—
Net cash provided by (used in) investing activities	5,350	(4,299)
Cash flows from financing activities:		
Proceeds from issuance of common stock, net of transaction costs	—	29,380
Proceeds from PPP Loan	332	—
Payments on notes payable	(158)	(179)
Payments on convertible note	—	(6,651)
Net cash provided by financing activities	174	22,550
Net decrease in cash and cash equivalents	(2,799)	6,420
Cash and cash equivalents at beginning of period	7,575	20,892
Cash and cash equivalents at end of period	$ 4,776	$ 27,312

	Six Months Ended June 30,	
	2020	**2019**
Supplemental disclosure of cash flows information		
Cash paid for income taxes	$ 2	$ 2
Cash paid for interest	$ 308	$ 372
Supplemental disclosure of non-cash transactions		
Change in accounts receivable resulting from insurance funds held in escrow	$ 4,875	$ —
Change in property and equipment resulting from change in accounts payable	$ (994)	$ (904)
Change in property and equipment resulting from change in accrued expenses	$ (287)	$ 218
Change in equity resulting from change in accrued expenses	$ 24	$ 1,300

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

1. Organization

Aqua Metals, Inc. (the "Company") was incorporated in Delaware and commenced operations on June 20, 2014 (inception). On January 27, 2015, the Company formed two wholly-owned subsidiaries, Aqua Metals Reno, Inc. ("AMR") and Aqua Metals Operations, Inc. (collectively, the "Subsidiaries"), both incorporated in Delaware. The Company is engaged in the business of equipment supply, technology licensing and related services for recycling lead through a novel, proprietary and patented process we developed and named AquaRefining™. Prior to November 29, 2019, the Company was engaged in the business of lead recycling through its patented and patent-pending AquaRefining technology. Following a fire at its lead recycling facility on November 29, 2019, the Company has been engaged in the pursuit of licensing opportunities within the lead battery recycling marketplace without maintaining and operating a capital-intensive lead recycling facility.

Unlike smelting, AquaRefining is a room temperature, water-based process that emits less pollution than smelting, the traditional method of lead recycling. The Company built its first recycling facility in Nevada's Tahoe Reno Industrial Center ("TRIC") in McCarran, Nevada and intended to pursue the development of additional lead acid battery recycling facilities based on the Company's AquaRefining technology, likely through licensing or joint development arrangements. The Company commenced the shipment of products for sale, consisting of lead compounds and plastics in April 2017, and through March 31, 2018 substantially all revenue was derived from the sale of lead compounds and plastics. In April 2018, the Company commenced the limited production of lead bullion, including AquaRefined lead. In July 2018, the Company commenced the sale of pure AquaRefined lead in the form of two tonne blocks and in October 2018, the Company commenced the sale of AquaRefined lead in the form of battery manufacturing ready ingots. In November 2018, the Company received official vendor certification from Clarios for its AquaRefined lead and, in December 2018, the Company commenced shipments directly to Clarios owned and partner battery manufacturing facilities. In 2019, the Company operated its demonstration AquaRefinery at commercial quantity production levels and produced over 35,000 AquaRefined ingots by operating the AquaRefinery 24 hours a day and seven days a week for sustained periods of time. The AquaRefining electrolyzers produced at or above the target 100 Kg/Hr of production throughput per module of six electrolyzers or ~ 16-17 Kg/Hr per electrolyzer and ran sustained endurance runs for over one month several times.

On the evening of November 29, 2019, a fire occurred in the AquaRefining area of the facility. The fire and related intense heat and smoke caused significant damage to a material amount of equipment in the AquaRefinery area, including all 16 AquaRefining modules, electrical and tank infrastructure, steel superstructure, control wiring and other supporting infrastructure. Following the fire, the Company adopted a capital light strategy designed to optimize shareholder value by focusing on equipment supply and licensing opportunities, which have always been a core part of the Company's business plans. The Company believes this path has the potential to maximize shareholder value in that it could be far less capital intensive than a rebuild and could be funded solely or primarily from a combination of cash on hand, insurance proceeds and asset dispositions.

2. Summary of Significant Accounting Policies

The significant accounting policies and estimates used in preparation of the condensed consolidated financial statements are described in the Company's audited consolidated financial statements as of and for the year ended December 31, 2019, and the notes thereto, which are included in the Company's Annual Report on Form 10-K for the year ended December 31, 2019, as filed with the Securities and Exchange Commission, or the SEC, on March 11, 2020. There have been no material changes in the Company's significant accounting policies during the three and six months ended June 30, 2020.

Basis of presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") as found in the Accounting Standards Codification ("ASC") and ASU of the Financial Accounting Standards Board ("FASB") and pursuant to the rules and regulations of the SEC. Accordingly, they do not include all the information and footnotes required by such accounting principles for complete financial statements. In the opinion of management, all adjustments (which include normal recurring adjustments) considered necessary to present fairly each of the condensed consolidated balance sheet as of June 30, 2020, the condensed consolidated statements of operations for the three and six months ended June 30, 2020 and June 30, 2019, the condensed consolidated statements of stockholders' equity for the three and six months ended June 30, 2020 and June 30, 2019 and the condensed consolidated statements of cash flows for the six months ended June 30, 2020 and June 30, 2019, as applicable, have been made. The condensed consolidated balance sheet as of December 31, 2019 has been derived from the Company's audited financial statements as of such date, but it does not include all disclosures required by U.S. GAAP. The accompanying unaudited condensed consolidated financial statements should be read in conjunction with the Company's audited consolidated financial statements for the period ended December 31, 2019, which are included on Form 10-K filed with the Securities and Exchange Commission on March 11, 2020.

The results of operations for the three and six months ended June 30, 2020 are not necessarily indicative of results that may be expected for the year ended December 31, 2020.

Principles of consolidation

The accompanying unaudited condensed consolidated financial statements include the accounts of the Company and its Subsidiaries, both of which are wholly-owned subsidiaries. Significant inter-company accounts and transactions have been eliminated in consolidation.

Use of estimates

The preparation of the condensed 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 condensed 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, valuation allowances for deferred tax assets, the determination of fair value of estimated asset retirement obligations, the determination of stock option expense and the determination of the fair value of stock warrants issued. Actual results could differ from those estimates.

Net loss per share

Basic net loss per share is computed by dividing net loss by the weighted average number of common shares outstanding during the period. Diluted net loss per share is computed by dividing the net loss by the weighted-average number of common share equivalents outstanding for the period determined using the treasury-stock method or the if-converted method, as applicable. For purposes of this calculation, stock options, restricted stock units (RSUs) and warrants to purchase common stock are considered to be common stock equivalents and are only included in the calculation of diluted net loss per share when their effect is dilutive. The following shares underlying outstanding convertible notes, stock options, RSUs and warrants to purchase common stock were antidilutive due to a net loss in the periods presented and, therefore, were excluded from the dilutive securities computation for the six months ended June 30, as indicated below.

	June 30,	
Excluded potentially dilutive securities (1):	2020	2019
Options to purchase common stock	1,425,004	3,604,001
Unvested restricted stock units	4,244,003	242,023
Financing warrants to purchase common stock	103,500	4,839,197
Total potential dilutive securities	5,772,507	8,685,221

(1) The number of shares is based on the maximum number of shares issuable on exercise or conversion of the related securities as of the period end. Such amounts have not been adjusted for the treasury stock method or weighted average outstanding calculations as required if the securities were dilutive.

Segment and geographic information

Operating segments are defined as components of an enterprise engaging in business activities for which discrete financial information is available and regularly reviewed by the chief operating decision maker in deciding how to allocate resources and in assessing performance. The chief operating decision maker views its operations and manages its business in one operating segment, and the Company operates in only one geographic segment.

Concentration of credit risk

Revenues from the following customers each represented at least 10% of total revenue for the three and six months ended June 30, 2020 and June 30, 2019, respectively. They also represented a significant portion of our trade accounts receivable as of December 31, 2019. The Company did not have a trade accounts receivable balance as of June 30, 2020.

	Revenue		Revenue		Trade Accounts Receivable	
	Three Months Ended June 30,		Six Months Ended June 30,		June 30, 2020	December 31, 2019
	2020	2019	2020	2019		
Clarios (successor of Johnson Controls Battery Group, Inc.)	— %	59 %	100 %	59 %	— %	100 %
P. Kay Metals	— %	38 %	— %	38 %	— %	— %

Recent accounting pronouncements

There were no other recent accounting pronouncements or changes in accounting pronouncements during the six months ended June 30, 2020 that are of significance or potential significance to the Company.

Insurance Proceeds

On November 29, 2019, there was a fire in the AquaRefining area of the TRIC facility. As of June 30, 2020, the Company had received $15.0 million in insurance payments as a result of the fire damage. Of the $15.0 million in insurance proceeds, $4.875 million were held in an escrow account at Veritex Community Bank (“Veritex”), the successor in interest to Green Bank, subject to a Memorandum of Agreement ("MOA") between the Company and Veritex (see Footnote 8 for additional detail regarding the MOA). The funds held in escrow are reported in "Other Assets" in the condensed consolidated balance sheet. The Company also has determined it is probable it will receive at least an additional $4.9 million in insurance proceeds, not including the $4.875 million held in escrow. This amount is included in insurance proceeds receivable in the accompanying condensed consolidated balance sheets.

3. Revenue Recognition

Prior to November 29, 2019, the Company had historically generated revenues by recycling lead acid batteries (“LABs”) and selling the recovered lead to its customers. Primary components of the recycling process include sales of recycled lead consisting of lead compounds, ingoted hard lead and ingoted AquaRefined lead as well as plastics. The Company commenced the shipment of products for sale, consisting of lead compounds and plastics in April 2017, and through March 31, 2018, all revenue was derived from the sale of lead compounds and plastics. In April 2018, the Company began shipping lead bullion in addition to lead compounds and plastics. In June 2018, the Company began shipping high-purity lead from its AquaRefining process.

Revenue from products transferred to customers at a single point in time with the delivery of the Company’s products to customers accounted for100% of revenue during the three and six months ended June 30, 2020 and June 30, 2019.

4. Inventory

Inventory consisted of the following (in thousands):

	June 30, 2020	December 31, 2019
Finished goods	$ 23	$ 47
Work in process	303	322
Raw materials	883	888
Total inventory	$ 1,209	$ 1,257

5. Property and Equipment, net

Property and equipment, net, consisted of the following (in thousands):

Asset Class	Useful Life (Years)	June 30, 2020	December 31, 2019
Operational equipment	3-10	$ 12,094	$ 12,094
Lab equipment	5	525	525
Computer equipment	3	221	221
Office furniture and equipment	3	221	221
Land	-	1,047	1,047
Building	39	19,508	19,508
Asset retirement cost	20	670	670
Equipment under construction		10,881	9,921
		45,167	44,207
Less: accumulated depreciation		(7,553)	(6,564)
Total property and equipment, net		$ 37,614	$ 37,643

Property and equipment depreciation expense was $0.5 million and $1.0 million for the three and six months ended June 30, 2020, respectively, and $0.9 million and $1.7 million for the three and six months ended June 30, 2019, respectively. Equipment under construction is comprised of various components being manufactured or installed by the Company, to be used in the McCarran, Nevada facility.

6. Asset Retirement Obligation

The Company records a liability in the period in which an asset retirement obligation (ARO) is incurred, in an amount equal to the discounted estimated fair value of the obligation that is capitalized. In each subsequent fiscal quarter, this liability is accreted up to the final retirement cost. The determination of the ARO is based on an estimate of the future cost to remove and decontaminate the McCarran facility upon closure. The actual costs could be higher or lower than current estimates. The discounted estimated fair value of the closure costs is $0.7 million and the obligation was recorded as of March 31, 2017, when the obligation was deemed to have occurred. Offsetting this ARO is, as noted in Note 5 above, an asset retirement cost of the same amount that has been capitalized. The estimated fair value of the closure costs is based on vendor quotes to remove and decontaminate the McCarran facility in accordance with the Company's closure plan as filed with the State of Nevada in its "Application for the Recycling of Hazardous Waste, by Written Determination" in 2016. Accretion of the ARO for the three and six months ended June 30, 2020 was approximately $12,000 and $24,000, respectively. Accretion of the ARO for the three and six months ended June 30, 2019 was approximately $11,000 and $23,000, respectively. The Company has entered into a facility closure trust agreement for the benefit of the Nevada Division of Environmental Protection (NDEP), an agency of the Nevada Division of Conservation and Natural Resources. Funds deposited in the trust are to be available, when and if needed, for potential decontamination and hazardous material cleanup in connection with the closure and/or post-closure care of the facility. The trustee will reimburse the Company or other persons as specified by the NDEP from the fund for closure and post-closure expenditures in such amounts as the NDEP shall direct in writing. Through June 30, 2020, $670,000 has been contributed to the trust fund and is reported in "Other Assets" in the condensed consolidated balance sheets.

7. Convertible Note Payable

On January 24, 2019, the Company repaid Interstate Battery the outstanding principal and interest on the convertible debt in the amount of $6.7 million. In connection with the payoff, the Company amortized the remaining discount on the note of $2.6 million and remaining deferred financing expenses of $20,000 to interest expense.

8. Notes Payable

Aqua Metals Reno, Inc. ("AMR"), a subsidiary of Aqua Metals Inc., entered into a $10,000,000 Loan Agreement with Green Bank on November 3, 2015. The term of the loan is twenty-one years. During the first twelve months, only interest was payable and thereafter monthly payments of interest and principal are due. The interest rate adjusts on the first day of each calendar quarter to the greater of six percent (6%) or two percent (2%) per annum above the minimum prime lending rate charged by large U.S. money center commercial banks as published in the Wall Street Journal. The terms of the Loan Agreement contain various affirmative and negative covenants. Among them, AMR must maintain a minimum debt service coverage ratio of 1.25 to 1.0 (beginning with the twelve-month period ending March 31, 2017), a maximum debt-to-net worth ratio of 1.0 to 1.0 and a minimum current ratio of 1.5 to 1.0. AMR was in compliance with all but the minimum debt service coverage ratio covenant as of and for each of the calendar quarters in the period March 31, 2017 through June 30, 2020. AMR has received a waiver for the minimum debt service coverage ratio covenant for each of the aforementioned calendar quarters. The net proceeds of the loan were used for the construction of the Company's lead acid battery recycling operation in McCarran, Nevada. Collateral for this loan is AMR's accounts receivable, goods, equipment, fixtures, inventory, land, building accessions and a certificate of deposit in the amount of $1,000,000. The certificate of deposit is reported in "Other Assets" in the condensed consolidated balance sheet.

The loan is guaranteed by the United States Department of Agriculture Rural Development ("USDA"), in the amount of 90% of the principal amount of the loan. The Company paid a guarantee fee to the USDA in the amount of $270,000 at the time of closing and is required to pay to the USDA an annual fee in the amount of 0.50% of the guaranteed portion of the outstanding principal balance of the loan as of December 31 of each year.

The costs associated with obtaining the Green Bank loan were recorded as a reduction to the carrying amount of the note and are being amortized as interest expense within the condensed consolidated statements of operations over the twenty-one year life of the loan.

On March 25, 2020, AMR entered into a Memorandum of Agreement ("MOA") with Veritex Community Bank ("Veritex"), the successor in interest to Green Bank, regarding the Loan Agreement. Pursuant to the MOA, the parties have agreed to the allocation of insurance proceeds, resulting from the fire, and proceeds of any sales of collateral secured by the Loan Agreement. The proceeds will be allocated between Veritex and AMR as indicated by the MOA. At such time that Veritex has received payments from insurance proceeds or asset sales equaling the amount outstanding under the Loan Agreement, the Loan Agreement will be retired and all further proceeds will accrue to AMR exclusively. Except as set forth in the MOA, all terms and conditions of the Loan Agreement remain in place and unchanged.

On May 7, 2020, the Company received loan proceeds in the amount of approximately $332,000 under the Paycheck Protection Program ("PPP"). The PPP, established as part of the Coronavirus Aid, Relief and Economic Security Act ("CARES Act"), provides for loans to qualifying businesses. The loans and accrued interest are forgivable after 24 weeks if the borrower uses the loan proceeds for eligible purposes, including payroll, benefits, rent and utilities, and maintains its payroll levels. The amount of loan forgiveness will be reduced if the borrower terminates employees or reduces salaries during the eight-week period.

The unforgiven portion of the PPP loan is payable over two years at an interest rate of 1%, with a deferral of payments for the first six months. The Company intends to use the loan proceeds for purposes consistent with the PPP. The Company plans to apply for PPP loan forgiveness and believes its use of the loan proceeds will meet the conditions for forgiveness of the loans. However, there is no assurance that the Company will be eligible for forgiveness of the loans, in whole or in part.

Notes payable is comprised of the following (in thousands):

	June 30, 2020		December 31, 2019	
Notes payable, current portion				
Paycheck Protection Program	$	147		—
Green Bank, net of issuance costs	$	338	$	296
Total notes payable, current portion	$	485	$	296
Notes payable, non-current portion				
Paycheck Protection Program	$	185		—
Green Bank, net of issuance costs	$	8,223	$	8,404
Total notes payable, non-current portion	$	8,408	$	8,404

9. Leases

The Company currently maintains one finance lease for equipment and two operating leases for real estate. The finance lease is immaterial to the Company's condensed consolidated financial statements. The operating leases have terms of 76 and 42 months and include one or more options to extend the duration of the agreements. These operating leases are included in "Other assets" on the Company's condensed consolidated balance sheets and represent the Company's right to use the underlying assets for the term of the leases. The Company's obligation to make lease payments are included in "Lease liability, current portion" and "Lease liability, non-current portion" on the Company's condensed consolidated balance sheets. The Company recognized sublease income of $108,000 and $216,000 for the three and six months ended June 30, 2020, respectively. The Company recognized sublease income of $105,000 and $149,000 for the three and six months ended June 30, 2019.

Based on the present value of the lease payments for the remaining lease term of the Company's existing leases, as of June 30, 2020, total right-of-use assets were approximately $0.96 million and operating lease liabilities were approximately $1.12 million. As of June 30, 2019, the Company's total right-of-use assets were approximately $1.42 million and operating lease liabilities were approximately $1.63 million.

Information related to the Company's right-of-use assets and related lease liabilities were as follows (in thousands):

	Three Months Ended June 30,				Six Months Ended June 30,			
	2020		2019		2020		2019	
Cash paid for operating lease liabilities	$	160	$	155	$	318	$	309
Operating lease cost	$	144	$	144	$	289	$	289

	June 30, 2020
Weighted-average remaining lease term	1.7 Years
Weighted-average discount rate	9.66 %

Future maturities of lease liabilities as of June 30, 2020 are as follows (in thousands):

Due in 12-month period ended June 30,		
2021	$	652
2022	$	560
	$	1,212
Less imputed interest	$	(94)
Total lease liabilities	$	1,118
Current operating lease liabilities	$	579
Non-current operating lease liabilities	$	539
	$	1,118

Note: Excludes a finance lease with a current liability of $ 6 and a non-current liability of $ 22.

10. Stockholders' Equity

Shares issued

During the six months ended June 30, 2020, the Company issued113,349 shares of common stock upon vesting of Restricted Stock Units ("RSUs") granted by the Company.

During the six months ended June 30, 2020, the Company issued1,676,680 shares of common stock granted to Company Employees.

During the six months ended June 30, 2020, the Company issued233,779 shares of common stock upon vesting of RSUs granted to Board members.

During the six months ended June 30, 2020, the Company issued227,876 shares of common stock to a prior Company executive to fulfill obligations related to separation agreement.

During the six months ended June 30, 2020, the Company issued23,078 shares of common stock to a consultant to fulfill obligations related to a consulting agreement.

During the six months ended June 30, 2020, the Company issued1,554 shares of common stock pursuant to the Officers and Directors Purchase Plan for proceeds of $1,500.

Stock-based compensation

The stock-based compensation expense was allocated as follows:

	Three months ended June 30,		Six months ended June 30,	
	2020	2019	2020	2019
Cost of product sales	$ 22	$ 17	$ 44	$ 92
Research and development cost	15	19	120	134
General and administrative expense	517	894	1,346	1,772
Total	$ 554	$ 930	$ 1,510	$ 1,998

The following assumptions were used in the Black-Scholes-Merton pricing model to estimate the fair value of options granted during the periods presented. There were no options issued during the three and six months ended June 30, 2020:

	Three months ended June 30,	Six months ended June 30,
	2019	2019
Expected stock volatility	86.3% - 87.5%	82.3% - 87.5%
Risk free interest rate	2.2% - 2.3%	2.2% - 2.5%
Expected years until exercise	2.8 - 3.4	2.2 - 2.5
Dividend yield	0 %	0 %

There were no stock option exercises during the three and six months ended June 30, 2020 and June 30, 2019.

Restricted shares

In March 2020, the Company granted 830,000 restricted shares, all of which were subject to vesting, with a grant fair value of $280,000 to employees. The shares vest in three equal annual installments over a three-year period. No shares vested during the six months ended June 30, 2020.

Restricted stock units

In March 2020, the Company granted 1,293,164 RSUs, all of which were subject to vesting, with a grant fair value of $440,000 to employees. The shares vest in six equal semi-annual installments over a three-year period. No shares vested during the six months ended June 30, 2020.

In May 2020, the Company issued 1,970,475 RSUs, that were originally granted in March 2020, but were subject to approval of the amendment of the 2019 stock incentive plan at the Annual Shareholders Meeting. All of the RSUs were subject to vesting, with a grant fair value of $ 670,000 to employees. The shares vest in six equal semi-annual installments over a three-year period. No shares vested during the six months ended June 30, 2020.

11. Commitments and Contingencies

On April 19, 2018, Stephen Clarke resigned as president and chief executive officer and as a member of the Board. Dr. Clarke’s resignation as an officer of the Company was treated as a termination without cause under his employment agreement with the Company. Pursuant to his employment agreement, Dr. Clarke was entitled to one-time severance benefits that includes severance and benefits continuation expense of approximately $0.9 million paid out over a 2-year period in consideration of his execution of a customary release and separation agreement. Additionally, Dr. Clarke was granted an extension of the exercise period of his stock options upon termination from 90 days to 2 years. The expense related to the modification of these stock option awards was approximately $15,000.

On December 3, 2018, Selwyn Mould resigned as chief operating officer. Mr. Mould’s resignation as an officer of the Company was treated as a termination without cause under his employment agreement with the Company. Pursuant to his employment agreement, Mr. Mould was entitled to one-time severance benefits that includes severance and benefits continuation expense of approximately $0.9 million paid out over a 2-year period in consideration of his execution of a customary release and separation agreement. Pursuant to a Separation Agreement and Release between the Company and Mr. Mould, Mr. Mould agreed to receive, in lieu of two years of salary, a cash severance payment of $100,000 payable in six equal installments in accordance with the Company's regular payroll practices, plus an award of restricted stock units that entitle him to receive, for each of the 21 consecutive months commencing on March 1, 2019, $33,333 of the Company's common shares based on volume-weighted average price over the 20 trading days preceding the first business day of the respective month. The Company has reserved the right, at its option, to pay Mr. Mould $33,333 of cash in lieu of any of the 21 monthly share issuances. The Separation Agreement and Release includes customary indemnification, confidentiality, non-disparagement and non-solicitation covenants and agreements of the parties.

Legal proceedings

Beginning on December 15, 2017, three purported class action lawsuits were filed in the United Stated District Court for the Northern District California against the Company, Stephen Clarke, Thomas Murphy and Mark Weinswig. On March 23, 2018, the cases were consolidated under the caption *In Re: Aqua Metals, Inc. Securities Litigation* Case No 3:17-cv-07142. On May 23, 2018, the Court appointed lead plaintiffs and approved counsel for the lead plaintiffs. On July 20, 2018, the lead plaintiffs filed a consolidated amended complaint ("Amended Complaint"), on behalf of a class of persons who purchased the Company's securities between May 19, 2016 and November 9, 2017, against us, Stephen Clarke, Thomas Murphy and Selwyn Mould. The Amended Complaint alleges the defendants made false and misleading statements concerning the Company's lead recycling operations in violation of Section 10(b) of the Securities Exchange Act of 1934 ("Exchange Act") and Rule 10b-5 promulgated thereunder and seeks to hold the individual defendants as control persons pursuant to Section 20(a) of the Exchange Act. The Amended Complaint also alleges a violation of Section 11 of the Securities Act of 1933 ("Securities Act") based on alleged false and misleading statements concerning our lead recycling operations contained in, or incorporated by reference in, our Registration Statement on Form S-3 filed in connection with the Company's November 2016 public offering. That claim is asserted on behalf of a class of persons who purchased shares pursuant to, or that are traceable to, that Registration Statement. The Amended Complaint seeks to hold the individual defendants liable as control persons pursuant to Section 15 of the Securities Act. The Amended Complaint seeks unspecified damages and plaintiffs' attorneys' fees and costs. On September 18, 2018, the defendants filed a motion to dismiss the Amended Complaint in its entirety and the plaintiff subsequently filed its opposition to the motion. In an Order dated August 14, 2019, the Court granted in part, and denied in part, the defendants' motion to dismiss. The Court granted the motion to dismiss the Securities Act Section 11 claim and the Exchange Act Section 10(b) and Rule 10b-5 claim based on alleged false and misleading statements and gave the plaintiffs leave to amend to address the deficiencies. The Court denied the motion to dismiss the Exchange Act Section 10(b) and Rule 10b-5 claims regarding site visits. On September 20, 2019, the plaintiffs filed a Second Amended Complaint that dropped the Securities Act Section 11 claim but otherwise alleges the same claims as were alleged previously. The Second Amended Complaint seeks unspecified damages and plaintiffs' attorneys' fees and costs. On November 1, 2019, the defendants filed a motion to dismiss the Exchange Act Section 10(b) and Rule 10b-5 claims in the Second Amended Complaint based on alleged false and misleading statements, but not the claims regarding site visits. The motion is under consideration by the Court. the Company denies that the claims in the Second Amended Complaint have any merit and the Company intends to vigorously defend the action.

Beginning on February 2, 2018, five purported shareholder derivative actions were filed in the United States District Court for the District of Delaware against the Company and certain of its current and former executive officers and directors, Stephen R. Clarke, Selwyn Mould, Thomas Murphy, Mark Weinswig, Vincent DiVito, Mark Slade and Mark Stevenson. On May 3, 2018, the cases were consolidated under the caption In re Aqua Metals, Inc. Stockholder Derivative Litigation, Case No. 1:18-cv-00201-LPS (D. Del.). The complaints were filed by persons claiming to be stockholders of Aqua Metals and generally allege that certain of the Company's officers and directors breached their fiduciary duties to us by violating the federal securities laws and exposing us to possible financial liability. The complaints seek unspecified damages and plaintiffs' attorneys' fees and costs. The parties have entered into a stipulation staying the action until 30 days after a decision on our motion to dismiss the Amended Complaint in the class action described above. The individual defendants deny that the claims in the shareholder derivative action have any merit and intend to vigorously defend the action.

A former employee has filed a complaint with Nevada OSHA claiming that he was wrongfully terminated for his protected activities related to safety. The matter has been settled between us and Nevada OSHA and the former employee has been given notice of this settlement. The Company has not received any notice that the former employee intends to pursue other remedies.

The Company is not party to any other legal proceedings. The Company may, from time to time, be party to litigation and subject to claims incident to the ordinary course of business. As the Company's growth continues, it may become party to an increasing number of litigation matters and claims. The outcome of litigation and claims cannot be predicted with certainty, and the resolution of any future matters could materially affect the Company's future financial position, results of operations or cash flows.

12. Subsequent Events

The Company has evaluated subsequent events through the date which the condensed consolidated financial statements were available to be issued.

No subsequent events have occurred.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Cautionary Statement

The following discussion and analysis should be read in conjunction with our unaudited condensed consolidated financial statements and the related notes thereto contained elsewhere in this report. The information contained in this quarterly report on Form 10-Q is not a complete description of our business or the risks associated with an investment in our common stock. We urge you to carefully review and consider the various disclosures made by us in this report and in our other filings with the Securities and Exchange Commission, or SEC, including our Annual Report on Form 10-K for the year ended December 31, 2019 filed with the SEC on March 11, 2020, or our Annual Report.

In this report we make, and from time to time we otherwise make written and oral statements regarding our business and prospects, such as projections of future performance, statements of management's plans and objectives, forecasts of market trends, and other matters that are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Statements containing the words or phrases "will likely result," "are expected to," "will continue," "is anticipated," "estimates," "projects," "believes," "expects," "anticipates," "intends," "target," "goal," "plans," "objective," "should" or similar expressions identify forward-looking statements, which may appear in our documents, reports, filings with the SEC, and news releases, and in written or oral presentations made by officers or other representatives to analysts, stockholders, investors, news organizations and others, and in discussions with management and other of our representatives.

Our future results, including results related to forward-looking statements, involve a number of risks and uncertainties, including those risks included below in Part II, Item 1 "Risk Factors". No assurance can be given that the results reflected in any forward-looking statements will be achieved. Any forward-looking statement speaks only as of the date on which such statement is made. Our forward-looking statements are based upon assumptions that are sometimes based upon estimates, data, communications and other information from suppliers, government agencies and other sources that may be subject to revision. Except as required by law, we do not undertake any obligation to update or keep current either (i) any forward-looking statement to reflect events or circumstances arising after the date of such statement or (ii) the important factors that could cause our future results to differ materially from historical results or trends, results anticipated or planned by us, or which are reflected from time to time in any forward-looking statement.

General

Aqua Metals (NASDAQ: AQMS) is engaged in the business of equipment supply, technology licensing and related services for recycling lead through a novel, proprietary and patented process we developed and named AquaRefining™. AquaRefining is a room temperature, water and organic acid-based process that greatly reduces environmental emissions. Lead is a globally traded commodity with a worldwide market value in excess of $20 billion. We believe our suite of patented and patent pending AquaRefining technologies will allow the lead-acid battery industry to simultaneously improve the environmental impact of lead recycling and scale recycling production to meet demand. Furthermore, our AquaRefining technologies result in high purity lead. We were formed as a Delaware corporation on June 20, 2014 and since our formation, we have focused our efforts on the development and testing of our AquaRefining process, the construction of our initial lead acid battery, or LAB, recycling facility at the Tahoe Reno Industrial Center, or TRIC, located in McCarran, Nevada and commercializing the AquaRefining process.

We completed the development of our first LAB recycling facility at Nevada's Tahoe Reno Industrial Center, or TRIC, in McCarran, Nevada and commenced production of battery breaking and limited operations during the first quarter of 2017. In April 2017, we commenced the shipment of products for sale, consisting of lead compounds as well as plastics. In April 2018, we commenced the limited production of lead bullion, including AquaRefined lead. In July 2018, we commenced the sale of pure AquaRefined lead in the form of two tonne blocks and in October 2018, we commenced the sale of AquaRefined lead in the form of battery manufacturing ready ingots. In November 2018, we received official vendor certification from Clarios for our AquaRefined lead and in December 2018, we commenced shipments directly to Clarios owned and partner battery manufacturing facilities. In 2019, we operated our demonstration AquaRefinery at commercial quantity production levels and produced over 35,000 AquaRefined ingots by operating the AquaRefinery 24 hours a day and 7 days a week for sustained periods of time. The AquaRefining electrolyzers produced at or above the target 100 Kg/Hr of production throughput per module of six electrolyzers or ~ 16-17 Kg/Hr per electrolyzer and ran sustained endurance runs for over one month several times.

In order to expand the demonstration AquaRefinery to its full capacity, we chose to idle the AquaRefinery beginning in September 2019 to facilitate contracting work required to step the plant up to the next level of capacity planned for late 2019 or early 2020. On the evening of November 29, 2019, a fire occurred in the AquaRefining area of the recycling facility at TRIC. The cause of the fire was not due to the technology or process of AquaRefining but rather to contracting activities. The fire and related intense heat and smoke caused significant damage to a material amount of equipment in the AquaRefinery area, including all 16 AquaRefining modules, electrical and tank infrastructure, steel superstructure, control wiring and other supporting infrastructure. The floor to ceiling firewall between the AquaRefining area and the rest of the plant isolated the worst of the damage to the AquaRefining area. The firewall also appears to have spared material damage to much of the key front-end process equipment, such as the battery breaker/separation system, concentrate production area, kettles and ingot casting, water treatment and recovery and other important areas of the plant. The administrative office area also remained intact.

Based on preliminary estimates, as of the date of this report, we believe that the replacement value of the equipment and plant lost or damaged in the fire could be over \$30 million excluding any business interruption cost recovery. Assets on our balance sheet as of June 30, 2020 that were not affected by the fire total approximately \$38 million in book value, including the battery breaker, melting kettles, kiln, filter presses, mixing and storage tanks, water recovery system and the building infrastructure plus the land. We have \$50 million dollars in combined property, equipment and business interruption insurance. Initial estimates for property, plant and business interruption claims may reach total limits. However, this number could change pending detailed analysis and review.

Pursuant to the loan agreement with Veritex Community Bank, or Veritex, the successor in interest to Green Bank, N.A., for approximately \$9.1 million (\$8.6 million net of issuance costs), Veritex is the loss payee on our insured claims and all funds are paid directly to Veritex, which in turn disburses the proceeds to us subject to their approval. In March 2020, we entered into a memorandum of agreement with Veritex pursuant to which the parties agreed on the allocation of funds from collected insurance payments. Pursuant to the memorandum of agreement, 90% of the initial \$5 million and 55% of the next \$7.5 million of insurance proceeds were allocated to us and the balance was allocated towards the retirement of the Veritex loan. Thereafter, 60% of the next \$12.5 million of insurance proceeds will be allocated to us, and the balance towards the repayment of the Veritex loan, until such time as the Veritex loan has been paid in full, after which 100% of all future insurance payouts will be disbursed directly to us.

As of the date of this report, of the \$15.0 million of insurance proceeds received from our insurance carriers, Veritex has put into escrow \$4.875 million and we have received \$10.125 million. We expect the insurance carriers to pay an additional \$10.0 to \$15.0 million in insurance proceeds over the next three to six months, of which we should receive \$6.0 to \$11.0 million. This estimate is based upon the cadence of receipts to date. We intend to vigorously pursue receipt of insurance proceeds to satisfy in full all of our property, casualty and business interruption losses, subject to the coverage limits.

We have engaged a public adjuster to support our legal and finance team and provide forensic accounting, construction expertise and direct interface with the insurers to assist us in quickly and properly documenting the loss and maximizing our insurance recovery amounts on the best possible timeline.

As a result of the fire we have suspended all commercial operations and the date on which we can resume revenue producing operations is currently undetermined. Following the fire, an investigation of the fire was commenced by the Storey County Fire Marshal and we were denied access to the fire damaged portion of the facility until late December 2019, at which time we were given access to the fire damaged area. Since then, we have been engaged in the process of analyzing the fire damage and the clean-up and disposal of the damaged equipment, and the development of our capital light strategy.

Plan of Operations

Following the November 2019 fire, we have been engaged in the pursuit of a capital light strategy that is based on the pursuit of licensing opportunities within the lead battery recycling marketplace without maintaining and operating a capital-intensive lead recycling facility. We plan to continue securing our cash position by working on the successful collection of additional insurance proceeds with the assistance of our retained public adjuster and special counsel to facilitate the collection for property and business interruption losses. We intend to dispose certain assets that are not essential to the capital light licensing strategy. We believe our capital light business strategy will require less space and less equipment and focus on the needs of our future licensees. As of the date of this report, we have accelerated our capital light business strategy, designed to optimize shareholder value by focusing on equipment supply and licensing opportunities, which have always been a core part of our business plans. We believe this path has the potential to maximize shareholder value in that it could be far less capital intensive than a rebuild and could be funded solely or primarily from a combination of cash on hand, insurance proceeds and asset dispositions.

Our capital light strategy is consistent with our long-held business strategy and objectives. When we designed and developed TRIC in 2016, we did so at a time when our business model assumed that TRIC would be the first of many LAB recycling facilities owned and operated by us. Commencing in 2017, we began to shift our focus away from the development of additional Company-owned LAB recycling facilities and towards the licensing of our AquaRefining technology to partners engaged in LAB recycling. We continued to develop TRIC as a LAB recycling facility for purposes of further demonstrating AquaRefining on a commercial scale. However, as a result of the fire and our high costs of capital we believe that the cost of restoring TRIC to its pre-fire state would not be the best use of our available and projected cash and that we may be able to achieve the benefits of operating our facility at TRIC in its pre-fire state, namely the development and demonstration of the licensing ready iteration of our AquaRefining technologies, which we call Version 1.25L, through a less costly commercialization program. Further, we believe that our results of operations to date can demonstrate to potential licensees the value proposition of our AquaRefining technologies. We believe that our AquaRefining technology would be a commercially attractive valuable proposition in the hands of battery recyclers, who typically have access to lower cost feedstock and ability to process all materials on site through a furnace.

Results of Operations

Our lead recycling facility was not in production during the second quarter due to the fire and the acceleration of our licensing strategy. Product sales during the second quarter of 2019 consisted of high purity lead from our AquaRefining process as well as lead bullion, lead compounds, and plastics. The following table summarizes our results of operations with respect to the items set forth below for the three and six months ended June 30, 2020 and 2019 together with the percentage change in those items (in thousands).

	Three months ended June 30,				Six months ended June 30,			
	2020	2019	Favorable (Unfavorable)	% Change	2020	2019	Favorable (Unfavorable)	% Change
Product sales	$ —	$ 1,483	$ (1,483)	(100.0)%	$ 18	$ 1,920	$ (1,902)	(99.1)%
Cost of product sales	1,306	7,185	5,879	(81.8)%	2,760	11,866	9,106	(76.7)%
Research and development cost	217	338	121	(35.8)%	459	958	499	(52.1)%
General and administrative expense	2,245	4,335	2,090	(48.2)%	4,630	8,351	3,721	(44.6)%
Total operating expense	$ 3,768	$ 11,858	$ 8,090	(68.2)%	$ 7,849	$ 21,175	$ 13,326	(62.9)%

As mentioned previously, product sales consist of high-purity lead from our AquaRefining process as well as lead bullion, lead compounds and plastics. Except for nominal sales of inventory in the first quarter of 2020, we did not generate revenue for the three and six months ended June 30, 2020 as there has been no production subsequent to the fire that occurred during the fourth quarter of 2019. The plant will not be in production during 2020 except for the operation and testing of our improved electrolyzers as part of the V1.25 program.

Cost of product sales includes raw materials, supplies and related costs, salaries and benefits, consulting and outside services costs, depreciation and amortization costs and insurance, travel and overhead costs. Cost of product sales decreased approximately 82% and 77% for the three and six months ended June 30, 2020, respectively, as compared to the three and six months ended June 30, 2019. Cost of product sales decreased during 2020 due to the suspension of production, resulting from the fire.

Research and development cost included expenditures related to the improvement of the AquaRefining technology. During the three and six months ended June 30, 2020, research and development costs decreased 36% and 52%, respectively, over the comparable periods in 2019. The decline in research and development cost is primarily the result of management's focus on transitioning to a capital light business strategy.

General and administrative expense decreased approximately 48% and 45% for the three and six months ended June 30, 2020, respectively, compared to the three and six months ended June 30, 2019. The suspension of activities under our Operations, Maintenance and Management Agreement with Veolia, reduced Company payroll and improvements in nearly all other expense categories drove the decrease. We expect to further decrease general and administrative expenses during the year as a result of our move to a more capital light strategy. For the six months ended June 30, 2019 we had $3.7 million of non-cash expense related to the Veolia agreement. We also incurred costs of approximately $0.2 million for professional serves fees associated with the sublease of the Alameda facility.

The following table summarizes our other income and interest expense for the three and six months ended June 30, 2020 and 2019 together with the percentage change in those items (in thousands).

	Three months ended June 30,				Six months ended June 30,			
	2020	2019	Favorable (Unfavorable)	% Change	2020	2019	Favorable (Unfavorable)	% Change
Other income and (expense)								
Interest expense	$ (164)	$ (203)	$ 39	19.2 %	$ (347)	$ (3,092)	$ 2,745	88.8 %
Interest and other income	$ 3	$ 77	$ (74)	(96.1)%	$ 25	$ 140	$ (115)	(82.1)%

Interest expense has related primarily to the $5.0 million Interstate Battery convertible note (until January of 2019) and the $10.0 million note payable to Veritex, the successor in interest to Green Bank, amortization of debt issuance costs incurred in connection with both of these notes, as well as an accrual for the USDA guarantee fee on the $10.0 million note to Veritex. On January 24, 2019, we repaid Interstate Battery the outstanding principal and interest on the convertible debt in the amount of $6.7 million. As a result of this debt repayment, we amortized the remaining discount on the note of $2.6 million and remaining deferred financing expenses of $20,000 to interest expense. Interest expense decreased for the three months ended June 30, 2020 as compared to the same period in 2019 as the result of the principle debt reduction through scheduled payments on the Veritex loan, along with decreases in the variable interest rate for that note.

Interest income decreased for the three months ended June 30, 2020 compared to the same period in 2019 due to lower cash balances during the period.

Liquidity and Capital Resources

As of June 30, 2020, we had total assets of $57.6 million and working capital of $6.1 million.

The following table summarizes our cash provided by (used in) operating, investing and financing activities (in thousands):

	Six months ended June 30,	
	2020	2019
Net cash used in operating activities	$ (8,323)	$ (11,831)
Net cash provided by (used in) investing activities	$ 5,350	$ (4,299)
Net cash provided by financing activities	$ 174	$ 22,550

Net cash used in operating activities

Net cash used in operating activities for the six months ended June 30, 2020 and 2019 was $8.3 million and $11.8 million, respectively. Net cash used in operating activities during each of these periods consisted primarily of our net loss adjusted for noncash items such as depreciation, amortization, stock-based compensation charges, and impairment charge as well as net changes in working capital.

Net cash provided by and used in investing activities

Net cash provided by investing activities for the six months ended June 30, 2020 was $5.4 million and consisted mainly of $7.6 million of insurance proceeds offset by $2.2 million related to purchases of property and equipment. Net cash used by investing activities for the six months ended June 30, 2019 was $4.3 million and consisted primarily of purchases of fixed assets related to the build-out of our TRIC recycling facility in Nevada. In March of 2019, we disposed of the capital shares of our UK subsidiary, Ebonex IPR, Ltd. The sale price was a nominal cash amount and did not contribute to net cash used in investing activities.

Net cash provided by financing activities

Net cash provided by financing activities for the six months ended June 30, 2020 was approximately $0.2 million and consisted of Payroll Protection Program loan proceeds of $0.3 million, partially offset by payments on debt. Net cash provided by financing activities for the six months ended June 30, 2019 consisted of $9.1 million net proceeds from our January 2019 public offering and $20.3 million net proceeds from our May 2019 public offering. This increase was offset by a $6.7 million payoff of the Interstate Battery convertible note.

As of June 30, 2020, we had total cash of $4.8 million and working capital of $6.1 million which includes a $4.9 million insurance proceeds receivable. As of the date of this report, we believe that we will require additional capital in order to fund our current level of ongoing costs and our proposed business plan over the next 12 months as we move forward with our capital light licensing strategy. We intend to acquire the necessary capital though the recovery of insurance proceeds on our fire related claims and the possible sale of certain equipment and assets at TRIC. However, there can be no assurance that we will be able to collect insurance proceeds or acquire proceeds from the sale of TRIC in amounts sufficient to fund the capital requirements or, if we are successful, that we will not require additional capital. If needed, we may seek funding through the sale of equity or debt securities. Funding that includes the sale of our equity may be dilutive. 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. Additionally, we were not in compliance with the minimum debt service coverage ratio covenant on our loan from Veritex as of the fiscal quarter ends between March 31, 2017 and June 30, 2020. We received a waiver for the minimum debt service coverage ratio covenant for those periods. While we expect to continue to receive waivers from Veritex for non-compliance with such covenant, there is no guarantee that we will receive such waivers. If Veritex determines not to grant us a waiver for non-compliance in the future, we would be in default of the loan and Veritex would be able to accelerate the payment of all amounts under the loan.

On March 25, 2020, we entered into a Memorandum of Agreement ("MOA") with Veritex regarding our loan from Veritex.

Pursuant to the MOA, we have agreed to the allocation of proceeds from insurance policies and sales of collateral secured by the loan. We have agreed on the allocation of all insurance proceeds, with the proceeds allocated to Veritex to be used to pay off all amounts outstanding under the loan, approximately $8.6 million as of the date of this report (inclusive of an approximate $500,000 prepayment penalty, netted against a $1,000,000 CD collateral).

Off-Balance Sheet Arrangements

We do not have any off-balance sheet financing arrangements.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

We do not enter into financial instruments for trading or speculative purpose. Our primary exposure to market risk is interest expense related to our debt with Veritex Bank. The interest rate on this loan adjusts on the first day of each calendar quarter equal to the greater of six percent (6%) or two percent (2%) per annum above the minimum prime lending rate charged by large U.S. money center commercial banks as published by the Wall Street Journal.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of the design and operation of our disclosure controls and procedures pursuant to Rule 13a-15 of the Securities Exchange Act of 1934. Based on that evaluation, management, including our chief executive officer and chief financial officer, concluded that our disclosure controls and procedures were effective as of June 30, 2020.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the six month period ended June 30, 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings

Beginning on December 15, 2017, three purported class action lawsuits were filed in the United Stated District Court for the Northern District California against us, Stephen Clarke, Thomas Murphy and Mark Weinswig. On March 23, 2018, the cases were consolidated under the caption *In Re: Aqua Metals, Inc. Securities Litigation* Case No 3:17-cv-07142. On May 23, 2018, the Court appointed lead plaintiffs and approved counsel for the lead plaintiffs. On July 20, 2018, the lead plaintiffs filed a consolidated amended complaint ("Amended Complaint"), on behalf of a class of persons who purchased our securities between May 19, 2016 and November 9, 2017, against us, Stephen Clarke, Thomas Murphy and Selwyn Mould. The Amended Complaint alleges the defendants made false and misleading statements concerning our lead recycling operations in violation of Section 10(b) of the Securities Exchange Act of 1934 ("Exchange Act") and Rule 10b-5 promulgated thereunder and seeks to hold the individual defendants as control persons pursuant to Section 20(a) of the Exchange Act. The Amended Complaint also alleges a violation of Section 11 of the Securities Act of 1933 ("Securities Act") based on alleged false and misleading statements concerning our lead recycling operations contained in, or incorporated by reference in, our Registration Statement on Form S-3 filed in connection with our November 2016 public offering. That claim is asserted on behalf of a class of persons who purchased shares pursuant to, or that are traceable to, that Registration Statement. The Amended Complaint seeks to hold the individual defendants liable as control persons pursuant to Section 15 of the Securities Act. The Amended Complaint seeks unspecified damages and plaintiffs' attorneys' fees and costs. On September 18, 2018, the defendants filed a motion to dismiss the Amended Complaint in its entirety and the plaintiff subsequently filed its opposition to the motion. In an Order dated August 14, 2019, the Court granted in part, and denied in part, the defendants' motion to dismiss. The Court granted the motion to dismiss the Securities Act Section 11 claim and the Exchange Act Section 10(b) and Rule 10b-5 claim based on alleged false and misleading statements and gave the plaintiffs leave to amend to address the deficiencies. The Court denied the motion to dismiss the Exchange Act Section 10(b) and Rule 10b-5 claims regarding site visits. On September 20, 2019, the plaintiffs filed a Second Amended Complaint that dropped the Securities Act Section 11 claim but otherwise alleges the same claims as were alleged previously. The Second Amended Complaint seeks unspecified damages and plaintiffs' attorneys' fees and costs. On November 1, 2019, the defendants filed a motion to dismiss the Exchange Act Section 10(b) and Rule 10b-5 claims in the Second Amended Complaint based on alleged false and misleading statements, but not the claims regarding site visits. The motion is under consideration by the Court. We deny that the claims in the Second Amended Complaint have any merit and we intend to vigorously defend the action.

Beginning on February 2, 2018, five purported shareholder derivative actions were filed in the United States District Court for the District of Delaware against us and certain of our current and former executive officers and directors, Stephen R. Clarke, Selwyn Mould, Thomas Murphy, Mark Weinswig, Vincent DiVito, Mark Slade and Mark Stevenson. On May 3, 2018, the cases were consolidated under the caption *In re Aqua Metals, Inc. Stockholder Derivative Litigation*, Case No. 1:18-cv-00201-LPS (D. Del.). The complaints were filed by persons claiming to be stockholders of Aqua Metals and generally allege that certain of our officers and directors breached their fiduciary duties to us by violating the federal securities laws and exposing us to possible financial liability. The complaints seek unspecified damages and plaintiffs' attorneys' fees and costs. The parties have entered into a stipulation staying the action until 30 days after a decision on our motion to dismiss the Amended Complaint in the class action described above. The individual defendants deny that the claims in the shareholder derivative action have any merit and intend to vigorously defend the action.

A former employee has filed a complaint with Nevada OSHA claiming that he was wrongfully terminated for his protected activities related to safety. The matter has been settled between us and Nevada OSHA and the former employee has been given notice of this settlement. We have not received any notice that the former employee intends to pursue other remedies.

We are not party to any other legal proceedings. We may, from time to time, be party to litigation and subject to claims incident to the ordinary course of business. As our growth continues, we may become party to an increasing number of litigation matters and claims. The outcome of litigation and claims cannot be predicted with certainty, and the resolution of any future matters could materially affect our future financial position, results of operations or cash flows.

Item 1A. Risk Factors

Investing in our common stock involves a high degree of risk. Before purchasing our common stock, you should read and consider carefully the following risk factors as well as all other information contained in this report, including our consolidated financial statements and the related notes. Each of these risk factors, either alone or taken together, could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our common stock. There may be additional risks that we do not presently know of or that we currently believe are immaterial, which could also impair our business and financial position. If any of the events described below were to occur, our financial condition, our ability to access capital resources, our results of operations and/or our future growth prospects could be materially and adversely affected and the market price of our common stock could decline. As a result, you could lose some or all of any investment you may make in our common stock.

Risks Relating to the Recent Fire at TRIC

We have experienced a fire at our TRIC facility which has caused significant damage and resulted in the suspension of all revenue producing operations On the evening of November 29, 2019, a fire occurred at our LAB recycling facility at TRIC. The cause of ignition is likely related to on-site contractor work that was being performed on the day of the fire. The fire was substantially contained to the AquaRefining area of the plant, however the fire destroyed or impaired beyond recovery substantially all of the AquaRefining equipment, including all 16 AquaRefining modules, control wiring and other supporting infrastructure. While we continue to assess the economic loss due to the fire, as of the date of this report we estimate the value of the equipment and plant lost or damaged due to the fire to be over $30 million excluding any business interruption cost recovery. We maintain insurance policies covering a total of up to $50 million of combined property, equipment and business interruption insurance. As of the date of this report, the insurance carriers have paid a total of $15 million on the covered claims and we expect the carriers to make significant additional payments over the coming months up to the presently estimated value of the equipment and plant lost or damaged due to the fire. However, there can be no assurance that we will be able to collect additional insurance proceeds to cover the loss. In the meantime, we have suspended all revenue producing operations pending our clean-up of the fire damage and development of our plan for the overall business. As of the date of this report, we are unable to estimate when we expect to resume any meaningful commercial or revenue producing operations. As of the date of this report, we intend to fund our resumption of commercial operations, in part, through our receipt of insurance proceeds, however there can be no assurance that we will receive additional insurance payments or, if we do, that any such payments will materially contribute to our ongoing costs of operations.

While we have $50 million of combined property, equipment and business interruption insurance, there can be no assurance that one or more carriers will not attempt to deny coverage. To date, we have submitted claims to each of our insurance carriers. Each of the insurance carriers has accepted coverage under the polices subject to the customary reservation of rights, but no carrier has to our knowledge indicated that it would deny or attempt to deny coverage. Each of our insurance policies contains customary exclusions from the carrier's obligation to cover claims made under the policies, including exclusions based on certain of our intentional acts or omissions, including our willful failure to maintain an adequate fire suppression system. We had acquired and installed a comprehensive fire suppression at TRIC, however the preliminary investigation by the local fire marshal indicates that the fire suppression system at TRIC failed to activate at the time of the fire. We had, at all times leading up to the fire, engaged a nationally recognized fire detection and prevention service company to service and maintain our fire suppression system. The service provider had serviced our fire suppression system as recent as November 12, 2019. As of the date of this report, we have not determined the reason for the failure of our fire suppression system to activate at the time of the fire. However, we have no reason to believe that the failure to activate is due to any action or failure to act on our part that would justify a carrier to exclude payment on our insurance claim. However, there can be no assurance that a carrier may not deny coverage based on its claim that we failed to maintain a fire suppression system as required by the policy or for some other exclusion under the policy. In the event that one or more carriers deny coverage under their policies, we may be unable to finance our recovery and resume commercial operations, in which case you could lose your investment.

Our ability to utilize insurance payments is subject to a memorandum of agreement with our secured lender. As of the date of this report, we are indebted to Veritex Community Bank, or Veritex, the successor in interest to Green Bank, N.A., for approximately $9.1 million ($8.6 million net of issuance costs), which is secured by liens on substantially all of our assets, including the proceeds of any payments made on our insurance claims. Pursuant to the credit agreement governing such indebtedness, Veritex is the loss payee on our insured claims and all funds are paid directly to Veritex, which in turn disburses the proceeds to us subject to their approval. In March 2020, we entered into a memorandum of agreement with Veritex pursuant to which the parties agreed on the allocation of funds from collected insurance payments. Pursuant to the memorandum of agreement, 90% of the initial $5 million and 55% of the next $7.5 million of insurance proceeds will be allocated to us and the balance will be allocated towards the retirement of the Veritex loan. Thereafter, 60% of the next $12.5 million of insurance proceeds will be allocated to us, and the balance towards the repayment of the Veritex loan, until such time as the Veritex loan has been paid in full, after which 100% of all future insurance payouts will be disbursed directly to us. Except as set forth in the memorandum of agreement, all terms and conditions of the credit agreement remain in place and unchanged, including, without limitation, our obligation to make monthly payments under the credit agreement and the effectiveness and enforceability of Veritex's liens and security interests under the credit agreement. To date, Veritex has disbursed to us funds based on the terms of the memorandum of agreement, however there can be no assurance that Veritex will continue to disburse insurance proceeds in accordance with the memorandum of agreement or that Veritex will not attempt to direct all insurance proceeds to the repayment to Veritex loan in full.

As a result of the fire, we are revising our plans for the commercialization of our AquaRefining technologies and there can be no assurance that such plans will be successful. When we designed and developed TRIC, we did so at a time when our business model assumed that TRIC would be the first of many LAB recycling facilities owned and operated by us. Commencing in 2017, we began to shift our focus away from the development of additional Company-owned LAB recycling facilities and towards the licensing of our AquaRefining technology to partners engaged in LAB recycling. We continued to develop TRIC as a LAB recycling facility for purposes of demonstrating AquaRefining on a commercial scale. However, as a result of the fire and our high costs of capital, we believe that the cost of restoring TRIC to its pre-fire state would not be the best use of our available cash and that we may be able to achieve the benefits of operating our facility at TRIC in its pre-fire state, namely the development and demonstration of the licensing ready iteration of our AquaRefining technologies, which we call Version 1.25L, through a less costly commercialization program. As of the date of this report, we plan to focus on licensing opportunities within the $20+ billion lead battery recycling marketplace. We believe this path is far less capital intensive than a rebuild of TRIC to its pre-fire state and we believe this plan could be funded solely or primarily from cash on hand plus ongoing insurance proceeds and asset disposition of the AquaRefinery. However, there can be no assurance that our revised business model will be successful or that we will acquire insurance proceeds sufficient to fund our revised business plan.

Risks Relating to Our Business

Since we have a limited operating history and have only recently commenced revenue producing operations, it is difficult for potential investors to evaluate our business. We formed our corporation in June 2014 and only commenced revenue producing operations in the first quarter of 2017.From inception through June 30, 2020, we generated a total of $11.4 million of revenue, all of which was derived primarily from the sale of lead compounds and plastics and, to a lesser extent, the sale of lead bullion and Aqua Refined lead. To date, our operations have primarily consisted of the development and testing and limited operations of our AquaRefining process, the construction of our initial LAB recycling facility at TRIC, the continuing development of our LAB recycling operations at TRIC and limited revenue producing operations as we brought those LAB recycling operations online. As a result of the November 2019 fire at TRIC, we have suspended all plant-based revenue producing operations pending our clean-up of the fire damage and development of our plan for resuming operations. In June 2020, we began operating the first iteration of Version 1.25L electrolyzers and plan to roll out additional iterations of improvements throughout 2020 leading up to what we believe will be the licensing ready iteration of 1.25L. Our limited operating history of the AquaRefinery, coupled with our development of the Version 1.25L electrolyzers ahead of us, 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, including, without limitation:

- the timing and success of our plan of commercialization and the fact that we have suspended operations at TRIC;
- our ability to demonstrate that our AquaRefining technology can be operated on a commercial scale;
- our ability to profitably operate our AquaRefining process on a commercial scale; and
- our ability to realize the expected benefits of our strategic partnerships with Clarios and Veolia.

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.

Our business is dependent upon our successful implementation of novel technologies and processes and there can be no assurance that we will be able to implement such technologies and processes in a manner that supports the successful commercial roll-out of our business model. While much of the technology and processes involved in our lead recycling operations are widely used and proven, the AquaRefining component of our lead recycling operations is largely novel with limited modest scale operations. While we have shown that our proprietary technology can produce AquaRefined lead on a small commercial scale, we had just begun in 2019 to demonstrate that we can produce AquaRefined lead on a large commercial scale. Further, as we endeavored to complete our AquaRefining production line, we continuously encountered unforeseen complications that delayed the ramping up of our AquaRefining modules and the integration of our AquaRefining process with the traditional lead recycling operations. There can be no assurance that we will not encounter similar unforeseen complications as we pursue our revised business model.

We will 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 June 30, 2020, we had total cash of $4.8 million and working capital of $6.1 million, which includes $4.9 million of insurance proceeds receivable. As of the date of this report, we believe that we will require additional capital in order to fund our current level of ongoing costs and our proposed business plan over the next 12 months as we move forward with our capital light licensing strategy. We intend to acquire the necessary capital though the recovery of insurance proceeds on our fire related claims and the possible sale of certain equipment and assets at TRIC. However, there can be no assurance that we will be able to collect insurance proceeds or acquire proceeds from the sale of TRIC in amounts sufficient to fund the capital requirements or, if we are successful, that we will not require additional capital. If needed, we may seek funding through the sale of equity or debt financing. Funding that includes the sale of our equity may be dilutive. If such funding 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.

We are currently under agreement with Veolia for the operations of TRIC, however there can be no assurance that we will continue to partner with Veolia. In February 2019, we entered into an Operations, Management and Maintenance Agreement with Veolia North America Regeneration Services, LLC, or Veolia. Pursuant to the Agreement, Veolia agreed to provide development of operations programs, start-up of new equipment and operations, maintenance and management services at our AquaRefining facility at TRIC. As a result of the November 2019 fire at TRIC, we have suspended all operations at TRIC pending our clean-up of the fire damage and development of our plan for resuming operations. In January 2020, we declared a force majeure under the Veolia Operations, Management and Maintenance Agreement and suspended payments to Veolia thereunder. If we follow through with our plans not to restore TRIC, we would expect that our Operations, Management and Maintenance Agreement would expire according to its terms in February 2021. The Operations, Management and Maintenance Agreement with Veolia contemplates entering into good faith negotiations with Veolia for a long-term agreement concerning Veolia's participation in the commercial licensing and management of our future AquaRefining facilities developed by licensees of Aqua Metals. Because of the force majeure and suspension of activity with Veolia there can be no assurance that we will be able to negotiate and conclude definitive long-term agreements with Veolia on commercially reasonable terms, or at all. If we are unable to conclude long-term agreements with Veolia, it is likely that we will lose Veolia as our partner in the commercial licensing and management of our future AquaRefining facilities.

We are subject to restrictive debt covenants that may limit our ability to run our business, finance our capital needs and pursue business opportunities and activities. As of the date of this report, we are indebted to Veritex for approximately $9.1 million ($8.6 million net of issuance costs), which is secured by liens on substantially all of our assets including insurance proceeds. The credit agreement governing such indebtedness contains covenants that limit our ability to take certain actions. These covenants could limit our ability to finance our future operations and capital needs and our ability to pursue business opportunities and activities that may be in our interest. If we breach any of these covenants, the debt holder could declare a default under the credit agreement, in which case all of the indebtedness may then become immediately due and payable. If the debt under the credit agreement is accelerated, we may not have, or be able to obtain, sufficient funds to make these accelerated payments. In addition, since all of the indebtedness to Veritex is secured by substantially all of our assets, a default under the credit facility could enable the debt holder to foreclose on its security interest and attempt to seize our assets. The affirmative and negative debt covenants could materially adversely impact our ability to operate and finance our business. In addition, our default under any of these covenants could subject us to accelerated debt payments or foreclosure proceedings that could threaten our ability to continue as a going concern.

Additionally, we were not in compliance with the minimum debt service coverage ratio covenant on our loan from Veritex as of the fiscal quarter ends between March 31, 2017, and June 30, 2020. We received a waiver for the minimum debt service coverage ratio covenant for those periods. While we expect to continue to receive waivers from Veritex for non-compliance with such covenant, there is no guarantee that we will receive such waivers. If Veritex determines not to grant us a waiver for non-compliance in the future, we would be in default of the loan and Veritex would be able to accelerate the payment of all amounts under the loan.

In the event of the acceleration of the Veritex loan, we will need additional financing to satisfy our obligations under the loan, which additional financing may not be available on reasonable terms or at all. As noted above, as of the date of this report, we are indebted to Veritex for approximately $9.1 million ($8.6 million net of issuance costs). The credit agreement governing such indebtedness contain various affirmative and negative covenants and if we breach any of these covenants, the debt holder could declare a default under the credit agreement, in which case all of the indebtedness may then become immediately due and payable. If the debt under the credit agreement is accelerated, we may not have sufficient funds to make the accelerated payments, in which case we would be required to seek additional funds through various financing sources, most likely through the sale of our equity or debt securities. However, there can be no assurance that such funds will be available on commercially reasonable terms, if at all. Further, any sale of our equity or equity-linked securities will result in additional dilution to our stockholders.

Our outstanding debt may make it difficult for us obtain additional financing using our future operating cash flow.We currently owe approximately $9.1 million to Veritex as of the date of this report. Such indebtedness could limit our ability to borrow additional funds to fund operations or expansion or increase the cost of any such borrowing, or both. Our inability to conduct additional debt financing could:

- limit our flexibility in developing our business operations and planning for, or reacting to, changes in our business;
- increase our vulnerability to, and reduce our flexibility to respond to, general adverse economic and industry conditions; and
- place us at a competitive disadvantage as compared to our competitors that are not as highly leveraged.

Any of these or other consequences or events could have a material adverse effect on our ability to finance our business and our operations.

Our business model is new and has not been proven by us or anyone else We are engaged in the business of producing recycled lead through a novel, and proven on a modest scale, 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. In addition, neither we nor anyone else has ever successfully built a production line that commercially recycles LABs without smelting. Further, there can be no assurance that either we or our licensees will be able to produce AquaRefined lead in commercial quantities at a cost of production that will provide us and our proposed licensees 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.

Certain industry participants may have the ability to restrict our and our future licensees' 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 a significant part of the market for used LABs. If LAB manufacturers and others involved in the reverse supply chain for used LABs attempt to restrict our and our future licensees' 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.

Even if we and our future licensees are successful in recycling lead using our processes, there can be no assurance that the AquaRefined lead will meet the certification and purity requirements of our potential customers. A key component of our business plan is the production of recycled lead through our AquaRefining process of the highest purity (at least 99.99% pure lead), which we refer to as AquaRefined lead. We believe that our AquaRefined lead will provide us and our future licensees with a revenue premium over the market price of lead on the London Metal Exchange, or LME, and, more importantly, the ability to produce AquaRefined lead will be vital to confirming the efficacy and relevancy of our proprietary technology. Lead purchasers will require that our AquaRefined lead meet certain minimum purity standards and, in all likelihood, require independent assays to confirm the lead's purity. As of the date of this report, we have produced limited quantities of AquaRefined lead and in November 2018, Clarios confirmed its approval of the purity of our AquaRefined lead by providing to us official vendor approval to receive finished lead at its manufacturing facilities. However, we have not produced AquaRefined lead in significant commercial quantities and there can be no assurance that we will be able to do so or, if we are able to produce AquaRefined lead in significant commercial quantities, that such lead will continue to meet the required purity standards of our customers.

While we have been successful in producing AquaRefined lead in small volumes, there can be no assurance that either we or our future licensees will be able to replicate the process, along with all of the expected economic advantages, on a large commercial scale either for us or our prospective licensees. Our commercial operations have primarily involved the production of lead compounds and plastics from recycled LABs, and more recently, the sale of lead bullion and AquaRefined lead. In April 2018, we commenced the limited production of cast lead bullion (mixture of lead purchased to prime the kettles and AquaRefined lead from our AquaRefining process), and in June 2018, we commenced the sale of pure AquaRefined lead in the form of two tonne blocks. While we believe that our results of operations to date can demonstrate to potential licensees the value proposition of our AquaRefining technologies, there can be no assurance that potential licensees will recognize the economic and other benefits of our AquaRefining technologies or that our future licensees will be able to produce AquaRefined lead in commercial quantities at a cost of production that will provide us and our proposed licensees with an adequate profit margin.

Our intellectual property rights may not be adequate to protect our business As of the date of this report, we have secured granted/allowed patents in the following countries/regions: U.S. (9837689, 10566665, 10340561, 10316420, 10665907, allowed 20180127888), Canada (2930945), China (105981212, 107849634, 3671833, allowed 107889511, allowed 107923057), Europe (3072180), Eurasia (32371), South Africa (2016/04083, 2017/08454, 2017/04123, 2017/08455), South

Korea (101739414, 101882932, 101926033, 102096976), Honduras (6074), India (318321), Indonesia (IDP000061176, IDP000066550), Japan (6173595, 6592088), Mexico (357027), OAPI (17808, 18736), ARIPO (4995), Ukraine (118037, 119580), Vietnam (6022968) and Australia (2014353227, 2015350562, 2017213449).

We also have further patent applications pending in the United States and numerous corresponding patent applications pending in 20 additional jurisdictions relating to certain elements of the technology underlying our AquaRefining process and related apparatus and chemical formulations. However, no assurances can be given that any patent issued, or any patents issued on our current and any future patent applications, will be sufficiently broad to adequately protect our technology. In addition, we cannot assure you that any patents issued now or in the future will not be challenged, invalidated, or circumvented.

Even patents issued to us 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, however as of the date of this report we have no such agreements in place and there can be no assurance we will be able to do so. 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 primarily 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, including Clarios, among others. Although we are currently seeking to negotiate such an agreement with Clarios as further discussed in the following paragraph, as of the date of this report, we have not entered into any such licensing, joint venture or strategic alliance agreements, apart from our equipment supply agreement with Clarios, and there can be no assurance that we will be able to do so on terms that benefit us, if at all. In addition, licensing programs, joint ventures and strategic alliances may involve significant other risks and uncertainties, insufficient revenue generation to offset liabilities assumed and expenses associated with the transaction, potential additional challenges in protecting our intellectual property, 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.

There can be no assurance that we will be able to negotiate our key agreement with Clarios on commercially reasonable terms, or at allIn February 2017, we entered into a series of agreements with Clarios, including an equipment supply agreement pursuant to which, among other things, we agreed to work with Clarios on the development of a program for the conversion of Clarios and certain strategic partners of Clarios' existing lead smelters throughout North and South America, China and Europe to a lead recycling process utilizing our AquaRefining technology and equipment, know-how and services. The equipment supply agreement discusses the development of the conversion program in general terms and contemplates that the parties will enter into a definitive development program agreement that is based on the general terms set forth in the equipment supply agreement and provides more detailed terms and conditions, including the economic obligations and rights of each party. We have agreed not to license our AquaRefining technology and equipment to third parties in the aforementioned regions until such time as we and Clarios have agreed on certain matters relating to the initial conversion of a Clarios facility. In June 2019, we entered into an agreement with Clarios to amend the equipment supply agreement pursuant to which we have agreed to use good faith, commercial best-efforts to conclude the discussion and negotiation of, and enter into, a development program agreement no later than the 90th day following our satisfaction of certain performance criteria agreed upon by Clarios and us, however those performance conditions were based on the operation of 16 AquaRefining modules at TRIC, which is unlikely. We have initiated discussions with Clarios to revise the performance conditions, however as of the date of this report we have been unable to reach an agreement with Clarios on revised performance standards. If we are unable to agree with Clarios on revised performance standards, we may be unable to sell AquaRefining equipment or license our AquaRefining technology to third-parties until the expiration of the Equipment Supply Agreement in June 2021 or the agreement's earlier termination. There can be no assurance that we will be able to negotiate and conclude a definitive development program agreement with Clarios on commercially reasonable terms, or at all.

There can be no assurance that Clarios will maintain the same level of interest in and commitment to the proposed joint development of our AquaRefining technologies. Our agreements with Clarios were originally entered into with Johnson Controls Battery Group, Inc. On May 1, 2019, Johnson Controls International plc announced that it had completed the sale of its battery group assets, formerly held by Johnson Controls Battery Group, Inc., to Brookfield Business Partners L.P. The acquired battery group assets now operates under the name Clarios. It is our understanding that the agreements and proposed business projects between us and Johnson Controls Battery Group, Inc. (collectively, the "Aqua Metals Collaboration") are now under the control of Clarios, and that certain members of the former management of Johnson Controls Battery Group, Inc. are now employed in similar capacities by Clarios. We have also been advised that Clarios and Brookfield Business Partners L.P. have expressed their interest in continuing the Aqua Metals Collaboration initiated by us and Johnson Controls Battery Group, Inc. Although there can be no assurance that Clarios currently has, and/or will maintain, the same level of interest in our joint collaboration as its predecessor, as Clarios could, for example, no longer have an interest in our technologies or have competing priorities, we currently have no reason to believe that Clarios and Brookfield Business Partners L.P. have lost interest. In addition, the change of control of the battery group may cause disruptions and distractions that adversely affect its ability to further the Aqua Metals Collaboration. For these and other reasons, Johnson Controls' sale of its battery group assets to Brookfield Business Partners L.P. could possibly have a material adverse effect on the Aqua Metals Collaboration.

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 their principal product to be produced by our AquaRefining technologies, recycled lead, is relatively volatile and reacts to general global economic conditions. Lead prices decreased from $2,139 per tonne on May 5, 2015 to a low of $1,554 per tonne on November 23, 2015 because of fluctuations in the market. Lead price per tonne was approximately $1,789 per tonne at the end of June 2020. 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 downturn 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 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 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;
- diminished ability to protect 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;
- compliance with the Federal Corrupt Practices Act and other anti-corruption laws;
- 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.

U.S. Government regulation and environmental, health and safety concerns may adversely affect our business Our operations and the operations of our licensees 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 including the Occupational Safety and Health Act ("OSHA") of 1970 and comparable state statutes. Our facilities and the facilities of our licensees will have to obtain environmental permits or approvals to expand, including those associated with air emissions, water discharges, and waste management and storage. We and our licensees may face opposition from local residents or public interest groups to the installation and operation of our facilities. In addition to permitting requirements, our operations and the operations of our licensees will be 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.

We and our future licensees will also be subject to inspection from time to time by various federal, state and local environmental, health and safety regulatory agencies and, as a result of these inspections, we and our licensees may be cited for certain items of non-compliance. For example, in August 2018, the Nevada Occupational Safety and Health Administration, or Nevada OSHA, delivered to us a citation and notification of penalty. The citation listed a number of items related to our compliance with Nevada OSHA's Lead Standard. We reached a settlement agreement with Nevada OSHA on the amount of penalties associated with the citation. We also agreed to engage a lead compliance expert to audit our facility at TRIC for compliance with all provision of the Lead Standard and to generate a written report with findings of any noncompliance, recommended corrective actions, and a time frame to correct the findings of noncompliance. We agreed with Nevada OSHA to correct all findings of noncompliance within the time frame proposed by the lead compliance expert in their report. The lead compliance expert has been engaged, has visited the facility at TRIC and has completed the written report. We have corrected all findings of noncompliance in a timely manner.

Failure to comply with the requirements of federal, state and local environmental, health and safety laws could subject our business and our licensees to significant penalties (civil or criminal) and other sanctions that could adversely affect our business. In addition, in the event we are unable to operate and expand our AquaRefining process and operations as safe and environmentally responsible, we and our licensees may face opposition from local governments, residents or public interest groups to the installation and operation of our facilities.

The development of new AquaRefining technology by us or our partners or licensees, and the dissemination of our AquaRefining process will depend on our ability to acquire necessary permits and approvals, of which there can be no assurance. As noted above, our AquaRefining processes will have to obtain environmental permits or approvals to operate, including those associated with air emissions, water discharges, and waste management and storage. In addition, we expect that any use of AquaRefining operations at our partner's facilities will require additional permitting and approvals. Failure to secure (or significant delays in securing) the necessary permits and approvals could prevent us and our partners and licensees from pursuing additional AquaRefining expansion, and otherwise adversely affect our business, financial results and growth prospects. Further, the loss of any necessary permit or approval could result in the closure of an AquaRefining and the loss of our investment associated with such facility.

Our business involves the handling of hazardous materials and we may become subject to significant fines and other liabilities in the event we mishandle those materials. The nature of our operations involves 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. 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. Any such liability could result in judgments or settlements that restrict our operations in a manner that materially adversely effects our operations and could result in fines, penalties or awards that could materially impair our financial condition and even threaten our continued operation as a going concern.

We will be subject to foreign government regulation and environmental, health and safety concerns that may adversely affect our business 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.

Risks Related to Owning Our Common Stock

A securities class action lawsuit and shareholder derivative lawsuit are pending against us and could have a material adverse effect on our business, results of operations and financial condition. A putative consolidated class action lawsuit and shareholder derivative lawsuit are pending against us and certain of our current and former directors and officers. These lawsuits may divert financial and management resources that would otherwise be used to benefit our operations. Although we deny the material allegations in the lawsuits and intend to defend ourselves vigorously, defending the lawsuits could result in substantial costs. No assurances can be given that the results of these matters will be favorable to us. An adverse resolution of any of these lawsuits could have a material adverse effect on our results of operations and financial condition. In addition, we may be the target of securities-related litigation in the future, both related and unrelated to the existing class action and shareholder derivative lawsuits. Such litigation could divert our management's attention and resources, result in substantial costs, and have an adverse effect on our business, results of operations and financial condition.

We maintain director and officer insurance that we regard as reasonably adequate to protect us from potential claims; however, we are responsible for meeting certain deductibles under the policies and, in any event, we cannot assure you that the insurance coverage will adequately protect us from claims made. Further, as a result of the pending litigation, the costs of insurance may increase and the availability of coverage may decrease. As a result, we may not be able to maintain our current levels of insurance at a reasonable cost, or at all, which might make it more difficult to attract qualified candidates to serve as executive officers or directors.

Our common stock is thinly traded and our share price has been volatile. Our common stock has traded on the Nasdaq Capital Market, under the symbol "AQMS", since July 31, 2015. Since that date, our common stock has at times been relatively thinly traded and subject to price volatility. There can be no assurance that we will be able to successfully maintain a liquid market for our common shares. The stock market in general, and early stage public companies in particular, have 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 and maintain a liquid 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. In addition, following periods of volatility in the market price of a company's securities, litigation has often been brought against that company and we may become the target of litigation as a result of price volatility. Litigation could result in substantial costs and divert our management's attention and resources from our business. This could have a material adverse effect on our business, results of operations and financial condition.

We have received a notice of delisting for failure to satisfy the Nasdaq continued listing rule concerning the composition of our audit committee. On May 19, 2020, Sushil "Sam" Kapoor resigned from our board of directors, or Board. Mr. Kapoor was one of three members of the audit committee of our Board. As a consequence of Mr. Kapoor's resignation, we became out of compliance with Nasdaq Listing Rule 5605(c)(2), which requires that the board of directors of a Nasdaq listed company have an audit committee made up of at least three independent directors. On May 19, 2020, we advised The Nasdaq Stock Market LLC of Mr. Kapoor's resignation, its consequences with regard to compliance with Nasdaq Listing Rules 5605(c)(2) and our intention to regain compliance with Nasdaq Listing Rule 5605(c)(2) in a timely manner. In accordance with Nasdaq Listing Rule 5605(c)(4), we have an automatic cure period in order to regain compliance with Nasdaq Listing Rule 5605(c)(2) until (i) the earlier of our next annual stockholders' meeting or May 19, 2021; or (ii) if our next annual stockholders' meeting is held before November 16, 2020, then we must evidence compliance no later than November 16, 2020. We intend to appoint a third independent director to our Board and audit committee, and thereby regain compliance Nasdaq Listing Rule 5605(c)(2), prior to our next annual meeting of stockholders. However, if we are unable to regain compliance with Nasdaq Listing Rule 5605(c)(2) in a timely manner, the Nasdaq will commence suspension and delisting procedures.

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" until 2020, although we will lose that status sooner if our revenues exceed $1.07 billion, if we issue more than $1.07 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 plans to pay dividends. We plan to reinvest all of our earnings, to the extent we have earnings, in order to pursue our business plan 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 our common stock.

Shares eligible for future sale may adversely affect the market for our common stock. Of the 60,946,501 shares of our common stock outstanding as of the date of this report, approximately 59,499,483 shares are held by “non-affiliates” and are freely tradable without restriction pursuant to Rule 144. In addition, in June 2020, we entered into an ATM Sales Agreement with B. Riley FBR, Inc., as sales agent, under which we may offer and sell, from time to time at our sole discretion, shares of our common stock, to or through the sales agent. We cannot predict the effect, if any, that future issuances or sales of our securities including sales of shares of our common stock pursuant to the ATM Sales Agreement or the availability of our securities for future issuance or sale, will have on the market price of our common stock. Issuances or sales of substantial amounts of our securities, including sales of our common stock pursuant to the ATM Sales Agreement, or the perception that such issuances or sales might occur, could negatively impact the market price of our common stock and the terms upon which we may obtain additional equity financing in the future.

Our charter documents and Delaware law may inhibit a takeover that stockholders consider favorable. Provisions of our certificate of incorporation 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 of incorporation and bylaws:

- limit who may call stockholder meetings;
- do not permit stockholders to act by written consent;
- do not provide for cumulative voting rights;
- establish an advance notice procedure for stockholders' proposals to be brought before an annual meeting, including proposed nominations of persons for election to our board of directors, 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, 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.

Item 6. Exhibits

Exhibit No.	Description	Method of Filing
3.1	First Amended and Restated Certificate of Incorporation of the Registrant	Incorporated by reference from the Registrant's Registration Statement on Form S-1 filed on July 22, 2015.
3.2	Second Amended and Restated Bylaws of the Registrant	Incorporated by reference from the Registrant's Current Report on Form 8-K filed on September 27. 2018.
3.3	Certificate of Amendment to First Amended and Restated Certificate of Incorporation of the Registrant	Incorporated by reference from the Registrant's Registration Statement on Form S-1 filed on June 9, 2015.
3.4	Certificate of Amendment to the First Amended and Restated Certificate of Incorporation	Incorporated by reference from the Registrant's Quarterly Report on Form 10Q filed on May 9, 2019
10.1	At The Market Issuance Sales Agreement between B. Riley FBR, Inc. and the Registrant.	Incorporated by reference from the Registrant's Current Report on Form 8-K filed on June 5, 2020
31.1	Certifications Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	Filed electronically herewith
31.2	Certifications Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	Filed electronically herewith
32.1	Certification of Principal Executive Officer and Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 1350).	Filed electronically herewith
101.INS	XBRL Instance Document	Filed electronically herewith
101.SCH	XBRL Taxonomy Extension Schema Document	Filed electronically herewith
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document	Filed electronically herewith
101.LAB	XBRL Taxonomy Extension Label Linkbase Document	Filed electronically herewith
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document	Filed electronically herewith
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document	Filed electronically herewith

SIGNATURES

In accordance with the requirements of the Exchange Act, the registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

AQUA METALS, INC.

Date:	August 4, 2020	By:	/s/ *Stephen Cotton*
			Stephen Cotton, President, Chief Executive Officer and Director (Principal Executive Officer)
Date:	August 4, 2020	By:	/s/ Judd Merrill
			Judd Merrill, Chief Financial Officer (Principal Financial Officer)

EXHIBIT 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER

Section 302 Certification

I, Stephen Cotton, certify that:

1) I have reviewed this quarterly report on Form 10-Q of Aqua Metals, Inc.;

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

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

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

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

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

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

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's fiscal quarter presented in this report that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

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

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

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

Date:	August 4, 2020	By:	/s/ *Stephen Cotton*
			Stephen Cotton, President and CEO (Principal Executive Officer)

EXHIBIT 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER

Section 302 Certification

I, Judd Merrill, certify that:

1) I have reviewed this quarterly report on Form 10-Q of Aqua Metals, Inc.;

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

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

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

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

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

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

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's fiscal quarter presented in this report that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

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

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

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

Date:	August 4, 2020	By:	/s/ Judd Merrill
			Judd Merrill, CFO (Principal Financial Officer)

EXHIBIT 32.1

CERTIFICATION PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Aqua Metals, Inc. (the "Company") on Form 10-Q for the quarterly period ended June 30, 2020, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we, Stephen Cotton, President and CEO, and Judd Merrill, CFO, of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

By:	/s/ *Stephen Cotton*	Dated:	August 4, 2020
	Stephen Cotton		
Title:	President and CEO (Principal Executive Officer)		
By:	/s/ Judd Merrill	Dated:	August 4, 2020
	Judd Merrill		
Title:	CFO (Principal Financial Officer)		

This certification is made solely for the purposes of 18 U.S.C. Section 1350, subject to the knowledge standard contained therein, and not for any other purpose.