AQUAMETALS

“Lead Reinvented”

Leading a Revolution in the Lead Acid Battery Industry

Corporate Presentation
December 2018

Safe Harbor

This document contains forward-looking statements concerning Aqua Metals, Inc. Forward-looking statements include, but are not limited to, our plans, objectives, expectations and intentions and other statements that contain words such as “expects,” “contemplates,” “anticipates,” “plans,” “intends,” “believes” and variations of such words or similar expressions that predict or indicate future events or trends, or that do not relate to historical matters. The forward looking statements in this document include the strength and efficacy of Aqua Metals’ portfolio of patent applications and issued patents, the lead acid battery recycling industry, the future of lead acid battery recycling via traditional smelters, the Company’s development of its commercial lead acid battery recycling facilities, the quality and efficiency of the Company’s proposed lead acid battery recycling operations, and the Company’s proposed joint development agreement with JCI and other potential licensing agreements. Those forward-looking statements involve known and unknown risks, uncertainties and other factors that could cause actual results to differ materially. Among those factors are: (1) the risk that the Company may not be able to produce and market AquaRefined lead on a commercial basis or, if the Company achieves commercial operations, that such operations will be profitable, (2) the fact that the Company only recently commenced production of AquaRefined lead and has not generated any significant revenue from the sale of AquaRefined lead to date, thus subjecting the Company to all of the risks inherent in an early-stage company; (3) the risk no further patents will be issued on the Company’s patent applications or any other application that it may file in the future and that those patents issued to date and any patents issued in the future will be sufficiently broad to adequately protect the Company’s technology, (4) the risk that the Company’s initial patents and any other patents that may be issued to it may be challenged, invalidated, or circumvented, (5) the risk that the Company may not be able to successfully conclude its proposed joint development agreement with JCI or, if it does, realize the expected benefits of such agreement, (6) risks related to Aqua Metals’ ability to raise sufficient capital, as and when needed, to develop and operate its recycling facilities and fund continuing losses from operations as the Company endeavors to achieve profitability; (7) changes in the federal, state and foreign laws regulating the recycling of lead acid batteries; (8) the Company’s ability to protect its proprietary technology, trade secrets and know-how and (9) those other risks disclosed in the section “Risk Factors” included in the Company’s Quarterly Report on Form 10-Q filed on November 7, 2018. Aqua Metals cautions readers not to place undue reliance on any forward-looking statements. The Company does not undertake, and specifically disclaims any obligation, to update or revise such statements to reflect new circumstances or unanticipated events as they occur, except as required by law.

Aqua Metals Overview

The Company's patented AquaRefining technology is positioned to disrupt the lead recycling industry

- Innovative recycling technology produces high purity lead from used lead acid batteries ("LABs") with major emissions reductions as compared to smelting
- Novel, IP-protected modular equipment/process utilizes a safe and bio-degradable electrolyte to dissolve lead compounds for electroplating
- Inaugural facility at Tahoe Reno Industrial Center ("TRIC") is now producing and shipping high purity AquaRefined lead to battery manufacturers
- 24/7 production achieved with initial four modules
- Production expected to ramp over course of 2019 as capital program seeks to recover the electrolyte, increase contribution margin
- Nasdaq Traded (AQMS): $2.07 (52-week range: $1.42 – $4.22)
- Market Capitalization: $91 Million
- Inside Ownership: 12%
- Employees: ~ 90

Investment Highlights

- Proven Technology Targeting $20+ Billion Global Lead Commodity Market
- First Company to Develop a Cleaner Alternative to Smelting for Lead Recycling
- Pursuing Strategic Partnership with Johnson Controls, Inc., the World's Largest Battery Company
- Supply Agreements with Interstate Batteries and Others
- Strong IP Portfolio and Intellectual Property Strategy Provides Protection for the Company's AquaRefining Technology
- Experienced Management and Board, with Deep Expertise in Process Chemistry and Lead Recycling Technologies

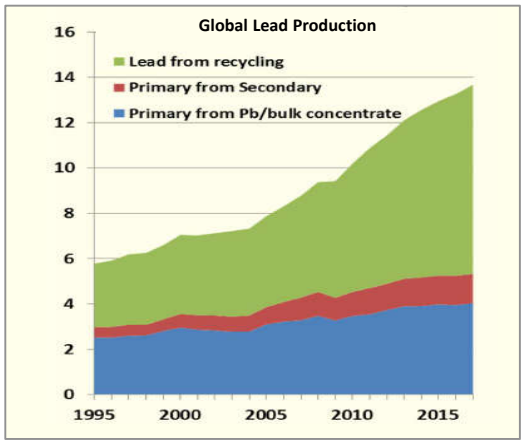
Lead Acid Battery (LAB) Market Driving Demand for Lead

Market Overview

- LAB production constitutes the largest use of lead today[1]
- Annual LAB sales expected to grow from $50+ billion today to $84+ billion by 2025[2] driving demand for lead
- To address growing shortage of high-purity lead, over 99% of used LABs are sent to recycling for lead extraction[4]
  - Recycled lead comprises >50% of all lead produced worldwide and >70% in the US[1], outpacing lead produced from mining
  - New high-growth LAB applications such as data centers, telecoms and 48V automotive require more high-purity lead
  - Smelter-based battery recycling cannot produce high-purity lead without additional refining
- LABs still represent over 95% of all batteries produced[3] due to recyclability, safety and performance (when compared to Li-ion and NiMH).

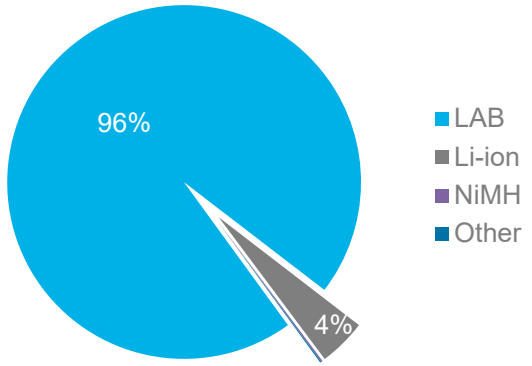
Lead Market[5]

(million mT/year)



Global Battery Production[2]

(GWh/year)



1) International Lead Association Research.
2) Grand View Research Report
3) Sandia National Laboratories, 25th International Materials Congress Presentation.
4) .BCI International, "Study Finds Lead Batteries Are Most Recycled Consumer Product".
5) CHR Metals Research through 2017.

The Problem and Solution to Recycling LABs

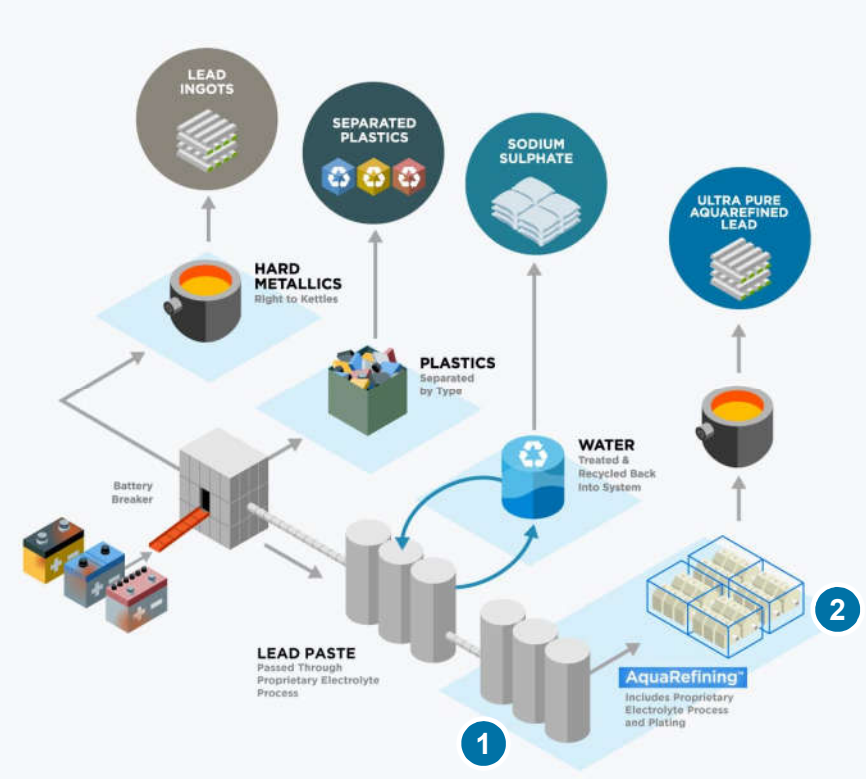
- **Smelting** - the current, conventional method of LAB recycling
  - A high temperature, polluting process with large costs and risks for proper environmental containment that can also leave behind large volumes of waste
  - Additional refining required to produce the high purity lead required for more modern and advanced lead acid batteries
  - Capacity expansion limited by environmental regulations and concerns

VS

- **AquaRefining** – novel, electrochemical, significantly less polluting alternative to LAB recycling
  - Room temperature, water-based process
  - Reduced, streamlined permitting with less environmental impact than smelting
  - Produces high-purity lead assayed at 99.996%
  - Uses less energy than smelting
  - Modular and scalable design
  - Co-exists with existing battery recycling facilities that want to expand capacity and product mix while decreasing emissions

How AquaRefining Works

- Used LABs are delivered, broken down and separated, with the plastics and hard metallics removed and the remaining lead paste (approximately 50% of the battery) sent to AquaRefining
- AquaRefining occurs in two steps:
  1. A room temperature, water-based and bio-degradable lead containing electrolyte is produced
  2. In a continuous process, a rotating disc electrolyzer plates and recovers lead from the electrolyte
- Ultra pure AquaRefined lead can then be cast into ingots
- The hard metallics removed from the used LABs are presently sold off and commencing in Q1 2019 we will begin to process the hard metallics into lead ingots in growing percentages over time



AquaRefineries are constructed using a modular design to enable scaling to fit a plant's desired manufacturing capacity – allowing AquaRefining to be added to an existing battery recycling facility. Operating at full-capacity, each module is designed to produce 2.4 mT/day of AquaRefined lead.

TRIC Production Facility – Significant Progress Made

We have proven that AquaRefining works!

Q1 2018
- Completed first 24-hour run of an AR module

Q2 2018
- Began continuous production of AquaRefined lead at LME + Premium

Q3 2018
- Shipped first 20-tonne truckload of lead bullion to JCI

Q4 2018
- Achieved steady state, 24/7 operations with initial four modules
- Commissioned Ingot line to enable direct shipment to battery manufacturing facilities
- Achieved approved lead supplier status from Johnson Controls
- Process improvements underway in order to recycle electrolyte and improve contribution margin
  - Initial phase to be completed around end of 2018 which is expected to recapture 75% of electrolyte
  - Second phase set for first half of 2019 which is expected to recapture remaining 25% of electrolyte

Aqua Metals' AquaRefining Modules at its TRIC facility

Strategic Partnership with Johnson Controls

The World's Largest Battery Company	• Produces 20-30% of the world's LABs and utilizes an equivalent percentage of the global lead supply(1) • Pioneered vertical integration and closed loop management of product life-cycle (manufacture batteries, distribute/recover, recycle) • Significant operations in the US, Canada, Mexico, South America, the EU and China
Material Supply and Offtake Agreement	• Established a 5-year, "rolling evergreen" supply and offtake agreement to provide the Company with used batteries on a tolling basis and to take up to 100% of the lead produced at TRIC at LME + Premia (at Aqua Metals' discretion) • Supports the potential expansion of TRIC from 16 to 32 AR modules
Equipment & Technology Licensing Agreement	• Aqua Metals and JCI are pursuing a joint development agreement whereby Aqua Metals is to supply AquaRefining and related equipment to JCI to progressively convert select locations of JCI's lead recycling facilities to AquaRefineries worldwide • Covers equipment, technology, licenses, patents and trade secrets • On April 16, 2018, the Company and JCI agreed to extend the timelines for concluding their joint development agreement by one year

1) Forbes, "Johnson Controls Shores Up Its Market Share As Exide Files For Bankruptcy".

Capital Light / Equipment Licensing Business Strategy

- Utilize current cash for capital programs targeting electrolyte recycling/reuse to improve contribution margin
- Continue to focus production and improvements on first four modules to minimize losses and conserve capital
- Increase proportion of finished metallic lead recovered from breaking batteries for which we can receive a premium over LME to unlock further contribution margin and improve plant economics
- Begin to scale to current 16 AR modules at TRIC once neutral to positive contribution margin is demonstrated
- Enter into joint development agreement with JCI (April 2019) and equipment and technology licensing agreements with other partners to bring in higher margin revenue streams, propelling margins and driving multiple expansion
- Potential to pursue non-dilutive financing at expansion point, supported and de-risked by existing supply and offtake partnerships

Licensing Greatly Expands Market Opportunity

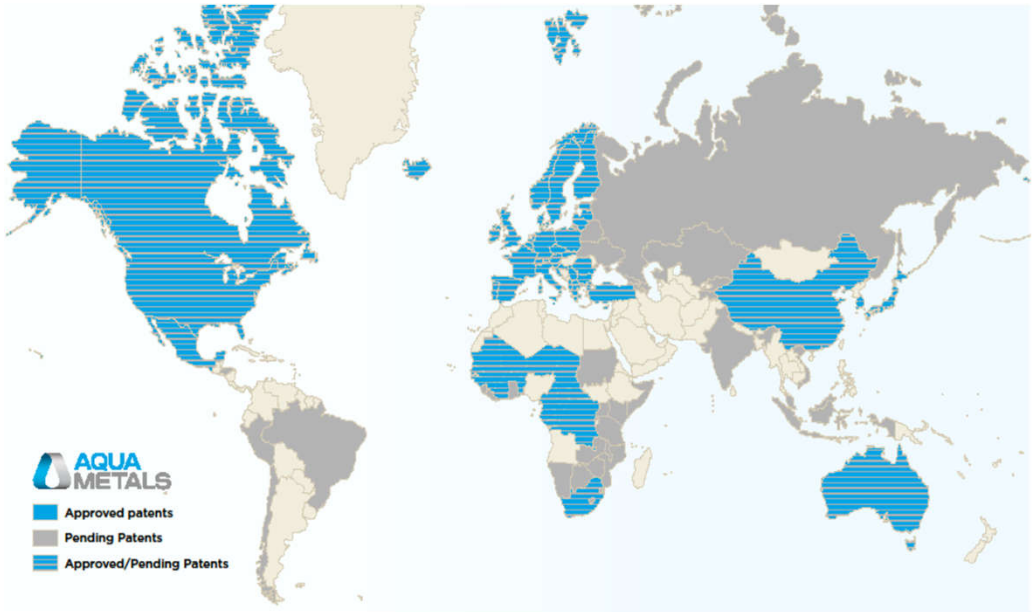
Illustrative Scope	TRIC Facility – Reno, Nevada	Equipment and Technology Supply
Description	Aqua Metals intends to complete ramp up at its lead recycling facility to 16 modules and potentially expand to 32 modules	Aqua Metals intends to supply AR equipment, technology and services to convert and update lead recycling facilities worldwide
Reach	US	NAFTA, EU, China
Potential % of Market	<1%	100%
Potential Lead Sales	**$100M+**	**$20B+**

Benefits of Retrofitting AquaRefining Modules in Existing Smelting Facility

- Recycling of lead paste through AquaRefining has potential to effectively double plant capacity
- Lower permitting requirements
- No concerns regarding increasing air emissions
- Potential to produce higher purity lead

Technology Supported by Strong IP Portfolio

- IP Strategy focused on “Materials and Methods”
  - Proving electrochemical battery recycling is viable
  - Actively protecting our breakthrough technology
    - Filed 90 patent applications across 7 distinct patents
    - Key patents filed in up to 21 different countries / regions
- 9 patents granted and 1 allowance by the following governing authorities:
  - US
  - Canada
  - Korea
  - Australia
  - Japan
  - South Africa
  - China
  - Europe
  - African Intellectual Property Organization
  - Mexico
  - Ukraine



Experienced Management and Board Focused on Execution

Executive Management Team

Stephen Cotton, *President*

- Extensive background in building, deploying, managing and decommissioning lead-acid batteries
- Served as Chief Commercial Officer of Aqua Metals from January 2015 to June 2017
- Spent 15 years as the Co-Founder and CEO of Data Power Monitoring Corporation and IntelliBatt (now Canara), a company with data center battery-monitoring products and services exited to a private equity firm in 2012

Judd Merrill, *CFO*

- Proven skills in SEC compliance and reporting, cash management, budgeting, forecasting, inventory management, due diligence, M&A and project management
- Formerly Director of Finance/Accounting for Klondex Mines Ltd.

Ben Taecker, *Vice President of Operations*

- 17 years of experience in manufacturing and operations leadership
- Spent 6 years in progressive leadership roles at JCI Lead Acid Battery Recycling Center in Florence, SC and was involved in early planning, construction, commissioning, scaling and leading operations of the facility.

Independent Directors

S. Shariq Yosufzai, *Non-Executive Chairman*

- Held various executive positions at Chevron for 20+ years and has held numerous Board and Chairman positions

Vincent DiVito, *Chair of the Audit Committee*

- Experienced in accounting and financing of NASDAQ companies; former CFO of fast-growing specialty chemicals company

Sushil ("Sam") Kapoor, *Chair of Compensation Committee*

- 30+ years of technology and operations experience; former Chief Global Operations Officer of Equinix, ran design/build/ops from 7-200+ sites while market cap grew from <$100M to $35B

Mark Stevenson, *Chair of the Nominating & Corporate Governance Committee*

- Former Head of Asian Operations for RSR / EcoBatt; experienced and successful in lead smelting and battery recycling; owner and organizer of bi-annual Secondary Lead Conference, accomplished metallurgist

Eric Prouty

- Experienced sustainability-focused analyst and successful business development consultant; Director of Hudson Technologies

Mark Slade

- Former Director of the London Metals Exchange; experienced and successful in metals and commodities trading

Financial Overview

Capitalization as of September 30, 2018

Cash and Cash Equivalents	**$28.8 million**
Debt	
Interstate Batteries, 11% Secured Convertible Note, $7.12 Conversion Price, Matures May 18, 2019	$6.1 million
Green Bank, Prime Rate plus 2-6% Secured Loan, Matures November 3, 2036[1]	$9.7 million
Thermo Fisher Financial Service, Capital Lease Obligations	$0.1 million
Warrants Outstanding (in thousands of shares)	**2,341**
Interstate Batteries	
$3.33 Exercise Price, Expires June 23, 2020	702
$9.00 Exercise Price, Expires May 24, 2019	1,605
National Securities Corporation, $10.00 Exercise Price, Expires November 21, 2019	33
Common Stock (Outstanding as of September 30, 2018, in thousands of shares)	**28,694**
Shares Outstanding Owned by	
Officers and Directors: 803	2.8%
Strategic Partners: 1,413	4.9%
Other Insiders: 4,722	16.5%

1) Net of issuance costs.

Operating Results

	Three months ended September 30		Nine months ended September 30,	
	2018	2017	2018	2017
Product sales	$ 1,169	$ 589	$ 3,378	$ 1,192
Operating cost and expense				
Cost of product sales	6,453	3,140	16,489	5,671
Research and development cost	967	1,367	3,645	6,538
General and administrative expense	2,174	1,925	7,862	4,897
Impairment charge	-	-	-	2,411
Total operating expense	9,594	6,432	27,996	19,517
Loss from operations	(8,425)	(5,843)	(24,618)	(18,325)
Other income and expense				
Interest expense	(919)	(454)	(2,225)	(1,250)
Interest and other income	81	7	123	28
Total other expense, net	(838)	(447)	(2,102)	(1,222)
Loss before income tax expense	(9,263)	(6,290)	(26,720)	(19,547)
Income tax expense	-	-	(2)	(2)
Net loss	$ (9,263)	$ (6,290)	$ (26,722)	$ (19,549)
diluted	38,779,710	20,265,020	32,553,939	19,732,372
Basic and diluted net loss per share	$ (0.24)	$ (0.31)	$ (0.82)	$ (0.99)

Balance Sheet

ASSETS	September 30, 2018	December 31, 2017
Current assets		
Cash and cash equivalents	$ 28,772	$ 22,793
Accounts receivable	861	882
Inventory	1,089	1,239
Prepaid expenses and other current assets	322	770
Total current assets	31,044	25,684
Non-current assets		
Property and equipment, net	46,411	45,733
Intellectual property, net	1,318	1,461
Other assets	1,574	1,564
Total non-current assets	49,303	48,758
Total assets	$ 80,347	$ 74,442
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable	$ 1,874	$ 1,436
Accrued expenses	2,020	1,801
Deferred rent, current portion	203	192
Notes payable, current portion	323	405
Convertible note payable, current portion	3,029	-
Total current liabilities	7,449	3,834
Deferred rent, non-current portion	644	771
Asset retirement obligation	733	701
Notes payable, non-current portion	8,669	8,839
Convertible note payable, non-current portion	-	1,332
Total liabilities	17,495	15,477
Stockholders' equity		
Common stock and Additional paid-in capital	144,416	113,807
Accumulated deficit	(81,564)	(54,842)
Total stockholders' equity	62,852	58,965
Total liabilities and stockholders' equity	$ 80,347	$ 74,442

Key Prospective Milestones

2H 2018

- Complete Phase I of capital improvement plan expected to achieve 75% recovery of electrolyte
- Continue discussions with additional prospective partners

2019

- Prove contribution margin to begin scaling of facility to 16 modules (capex & opex improvements)
- Begin Phase II of capital improvement plan expected to achieve additional 25% recovery of electrolyte
- Increase proportion for finished lead recovered to boost plant economics
- Complete JCI joint development agreement
- Commence engineering and define AquaRefining rollout plan for inaugural JCI facility
- Pursue and evaluate strategic relationships including licensing or co-processing relationships with existing or potential partners
- Consider potential TRIC expansion to 32 AR modules

Takeaways

- Aqua Metals is at a key inflection point
  - Fortified management and board members focused on *execution*
  - AquaRefining works and in early stages of commercial production
  - Partnerships are strengthening and new partnership potential is growing
- The lead market is growing in size and complexity
  - Market growth projections continue and LME trend for lead appears favorable
  - Advent of advanced lead batteries (AGM start / stop, stationary applications) increases market value of pure AquaRefined lead we believe we can capture
- Risk is weighted much more towards ability to *execute* than ability to invent
  - Fundamental technology is widely accepted as proven
  - Specific capital plan to increase margins in place to be deployed in 2019
- Increasing backdrop of corporate and government support for sustainability and profitable environmental companies should stimulate further partnerships

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