

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

FORM 10-Q

QUARTERLY REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended **June 30, 2019**
or

TRANSITION REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number **0-29185**

QS ENERGY, INC.

(Exact name of registrant as specified in its charter)

Nevada

(State or other jurisdiction of
incorporation or organization)

52-2088326

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

23902 FM 2978

Tomball, TX 77375

(Address, including zip code, of principal executive offices)

(805)-845-3561

(Registrant's telephone number, including area code)

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

Securities registered pursuant to Section 12(g) of the Exchange Act: Common Stock, \$0.001 par value.

Check whether the Registrant (1) 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 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. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one)

Large accelerated filer

Non-accelerated filer

Emerging growth company

Accelerated filer

Smaller reporting 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

The number of shares of the Registrant's Common Stock outstanding as of August 13, 2019 was 299,149,251.

QS ENERGY, INC.
FORM 10-Q

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PART I – FINANCIAL INFORMATION

Item 1. Unaudited Condensed Consolidated Financial Statements

**QS ENERGY, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS**

	June 30, 2019 (unaudited)	December 31, 2018
ASSETS		
Current assets:		
Cash	\$ 711,000	\$ 1,153,000
Prepaid expenses and other current assets	239,000	34,000
Total current assets	<u>950,000</u>	<u>1,187,000</u>
Property and equipment, net of accumulated depreciation of \$76,000 and \$73,000 at June 30, 2019 and December 31, 2018, respectively	21,000	24,000
Other assets	2,000	2,000
Total assets	<u>\$ 973,000</u>	<u>\$ 1,213,000</u>
LIABILITIES AND STOCKHOLDERS' DEFICIT		
Current liabilities:		
Accounts payable-license agreements	\$ 1,137,000	\$ 1,073,000
Accounts payable and accrued expenses	505,000	658,000
Accrued expenses and accounts payable-related parties	–	55,000
Convertible debentures, net of discounts of \$369,000 and \$1,100,000 at June 30, 2019 and December 31, 2018, respectively	855,000	909,000
Total current liabilities	<u>2,497,000</u>	<u>2,695,000</u>
Commitments and contingencies		
Stockholders' deficit		
Common stock, \$.001 par value: 500,000,000 shares authorized, 298,457,191 and 256,123,515 shares issued and outstanding at June 30, 2019 and December 31, 2018, respectively	298,456	256,123
Additional paid-in capital	115,085,544	111,429,877
Accumulated deficit	<u>(116,908,000)</u>	<u>(113,168,000)</u>
Total stockholders' deficit	<u>(1,524,000)</u>	<u>(1,482,000)</u>
Total liabilities and stockholders' deficit	<u>\$ 973,000</u>	<u>\$ 1,213,000</u>

See notes to condensed consolidated financial statements.

QS ENERGY, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS, UNAUDITED

	Three months ended		Six months ended	
	June 30,		June 30,	
	2019	2018	2019	2018
Revenues	\$ -	\$ -	\$ -	\$ -
Costs and Expenses				
Operating expenses	655,000	462,000	1,133,000	956,000
Research and development expenses	432,000	48,000	583,000	95,000
Loss before other expense	(1,087,000)	(510,000)	(1,716,000)	(1,051,000)
Other expense				
Interest and financing expense	(371,000)	(248,000)	(2,024,000)	(407,000)
Net Loss	<u>\$ (1,458,000)</u>	<u>\$ (758,000)</u>	<u>\$ (3,740,000)</u>	<u>\$ (1,458,000)</u>
Net loss per common share, basic and diluted	<u>\$ (0.00)</u>	<u>\$ (0.00)</u>	<u>\$ (0.01)</u>	<u>\$ (0.01)</u>
Weighted average common shares outstanding, basic and diluted	<u>293,284,367</u>	<u>242,994,163</u>	<u>279,658,273</u>	<u>238,825,606</u>

See notes to condensed consolidated financial statements.

QS ENERGY, INC.
CONDENSED CONSOLIDATED STATEMENT OF STOCKHOLDERS' DEFICIT, UNAUDITED
FOR THE SIX MONTHS ENDED JUNE 30, 2019 AND JUNE 30, 2018

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount			
Balance, January 1, 2019	256,123,515	\$ 256,123	\$ 111,429,877	\$ (113,168,000)	\$ (1,482,000)
Common stock issued on exercise of warrants and options	3,677,190	3,677	269,323		\$273,000
Common stock issued on conversion of notes payable	38,406,486	38,406	2,006,594		2,045,000
Fair value of warrants and beneficial conversion feature of issued convertible notes			1,118,000		1,118,000
Fair value of options and warrants issued as compensation			194,000		194,000
Common stock issued for services	250,000	250	67,750		68,000
Net loss				(3,740,000)	(3,740,000)
Balance, June 30, 2019	<u>298,457,191</u>	<u>\$ 298,456</u>	<u>\$ 115,085,544</u>	<u>\$ (116,908,000)</u>	<u>\$ (1,524,000)</u>

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount			
Balance, January 1, 2018	234,076,907	\$ 234,077	\$ 108,000,923	\$ (110,109,000)	\$ (1,874,000)
Common stock issued on exercise of warrants and options	12,697,483	12,697	634,303		647,000
Common stock issued on conversion of notes payable	4,624,125	4,624	332,376		337,000
Fair value of warrants and beneficial conversion feature of issued convertible notes			319,000		319,000
Fair value of options and warrants issued as compensation			245,000		245,000
Common stock issued for services	50,000	50	11,950		12,000
Net loss				(1,458,000)	(1,458,000)
Balance, June 30, 2018	<u>251,448,515</u>	<u>\$ 251,448</u>	<u>\$ 109,543,552</u>	<u>\$ (111,567,000)</u>	<u>\$ (1,772,000)</u>

See notes to condensed consolidated financial statements.

QS ENERGY, INC.
CONDENSED CONSOLIDATED STATEMENT OF STOCKHOLDERS' DEFICIT, UNAUDITED
FOR THE THREE MONTHS ENDED JUNE 30, 2019 AND JUNE 30, 2018

	<u>Common Stock</u>		<u>Additional Paid-in Capital</u>	<u>Accumulated Deficit</u>	<u>Total Stockholders' Deficit</u>
	<u>Shares</u>	<u>Amount</u>			
Balance, April 1, 2019	294,805,488	\$ 294,805	\$ 114,166,195	\$ (115,450,000)	\$ (989,000)
Common stock issued on exercise of warrants and options	1,715,037	1,715	99,285		\$101,000
Common stock issued on conversion of notes payable	1,686,666	1,686	207,314		209,000
Fair value of warrants and beneficial conversion feature of issued convertible notes			450,000		450,000
Fair value of options and warrants issued as compensation			95,000		95,000
Common stock issued for services	250,000	250	67,750		68,000
Net loss				(1,458,000)	(1,458,000)
Balance, June 30, 2019	<u>298,457,191</u>	<u>\$ 298,456</u>	<u>\$ 115,085,544</u>	<u>\$ (116,908,000)</u>	<u>\$ (1,524,000)</u>

	<u>Common Stock</u>		<u>Additional Paid-in Capital</u>	<u>Accumulated Deficit</u>	<u>Total Stockholders' Deficit</u>
	<u>Shares</u>	<u>Amount</u>			
Balance, April 1, 2018	236,751,367	\$ 236,752	\$ 108,568,248	\$ (110,809,000)	\$ (2,004,000)
Common stock issued on exercise of warrants and options	11,351,773	11,351	564,649		576,000
Common stock issued on conversion of notes payable	3,345,375	3,345	234,655		238,000
Fair value of warrants and beneficial conversion feature of issued convertible notes			74,000		74,000
Fair value of options and warrants issued as compensation			102,000		102,000
Net loss				(758,000)	(758,000)
Balance, June 30, 2018	<u>251,448,515</u>	<u>\$ 251,448</u>	<u>\$ 109,543,552</u>	<u>\$ (111,567,000)</u>	<u>\$ (1,772,000)</u>

See notes to condensed consolidated financial statements.

QS ENERGY, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS, UNAUDITED

	Six months ended	
	June 30	
	2019	2018
Cash flows from Operating Activities		
Net loss	\$ (3,740,000)	\$ (1,458,000)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock based compensation expense	194,000	245,000
Issuance of common stock for services	68,000	12,000
Amortization of debt discount and interest expense	1,991,000	381,000
Depreciation and amortization	3,000	17,000
Changes in operating assets and liabilities:		
Prepaid expenses and other assets	(205,000)	6,000
Accounts payable and accrued expenses	(153,000)	(13,000)
Accounts payable – license agreements	64,000	122,000
Accounts payable and accrued expenses – related parties	(55,000)	12,000
Deposits and other current liabilities	–	–
Net cash used in operating activities	(1,833,000)	(676,000)
Cash flows from financing activities		
Net proceeds from issuance of convertible notes and warrants	1,118,000	318,000
Net proceeds from exercise of warrants	273,000	647,000
Net cash provided by financing activities	1,391,000	965,000
Net increase (decrease) in cash	(442,000)	289,000
Cash, beginning of period	1,153,000	204,000
Cash, end of period	\$ 711,000	\$ 493,000
Supplemental disclosures of cash flow information		
Cash paid during the year for:		
Interest	\$ –	\$ –
Income Taxes	\$ 1,600	\$ 1,600
Non-cash investing and financing activities		
Conversion of convertible debentures to common stock	\$ 2,045,000	\$ 337,000
Fair value of warrants and beneficial conversion feature associated with issued convertible notes	\$ 1,118,000	\$ 319,000

See notes to condensed consolidated financial statements.

QS ENERGY, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS, UNAUDITED
SIX MONTHS ENDED JUNE 30, 2019 AND 2018

1. Description of Business

QS Energy, Inc. (“QS Energy”, “Company”) was incorporated on February 18, 1998, as a Nevada Corporation under the name Mandalay Capital Corporation. The Company changed its name to Save the World Air, Inc. on February 11, 1999. Effective August 11, 2015, the Company changed its name to QS Energy, Inc. The Company’s common stock is quoted under the symbol “QSEP” on the Over-the-Counter Bulletin Board. More information including the Company’s fact sheet, logos and media articles are available at our corporate website, www.qsenergy.com.

QS Energy develops and commercializes energy efficiency technologies that assist in meeting increasing global energy demands, improving the economics of oil extraction and transport, and reducing greenhouse gas emissions. The Company’s intellectual properties include a portfolio of domestic and international patents and patents pending, a substantial portion of which have been developed in conjunction with and exclusively licensed from Temple University of Philadelphia, PA (“Temple”). QS Energy’s primary technology is called Applied Oil Technology (AOT), a commercial-grade crude oil pipeline transportation flow-assurance product. Engineered specifically to reduce pipeline pressure loss, increase pipeline flow rate and capacity, and reduce shippers’ reliance on diluents and drag reducing agents to meet pipeline maximum viscosity requirements, AOT is a 100% solid-state system that reduces crude oil viscosity by applying a high intensity electrical field to crude oil feedstock while in transit. The AOT product is seeking to transition from the research and development stage to initial production for continued testing in advance of our goal of seeking acceptance and adoption by the midstream pipeline marketplace.

Basis of Presentation

The accompanying condensed consolidated financial statements are unaudited. These unaudited interim condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”) and applicable rules and regulations of the Securities and Exchange Commission (“SEC”) regarding interim financial reporting. Certain information and note disclosures normally included in the financial statements prepared in accordance with GAAP have been condensed or omitted pursuant to such rules and regulations. Accordingly, these interim condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and notes thereto contained in the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2018 filed with the SEC. The condensed consolidated balance sheet as of December 31, 2018 included herein was derived from the audited consolidated financial statements as of that date, but does not include all disclosures, including notes, required by GAAP.

In the opinion of management, the accompanying unaudited condensed consolidated financial statements contain all adjustments necessary to fairly present the Company’s financial position and results of operations for the interim periods reflected. Except as noted, all adjustments contained herein are of a normal recurring nature. Results of operations for the fiscal periods presented herein are not necessarily indicative of fiscal year-end results.

2. Summary of Significant Accounting Policies

Consolidation Policy

The accompanying consolidated financial statements of QS Energy Inc. include the accounts of QS Energy Inc. (the Parent) and its wholly owned subsidiaries, QS Energy Pool, Inc. and STWA Asia Pte. Limited. Intercompany transactions and balances have been eliminated in consolidation.

Going Concern

The accompanying consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the settlement of liabilities and commitments in the normal course of business. As reflected in the accompanying consolidated financial statements, during the six-months ended June 30, 2019, the Company incurred a net loss of \$3,740,000, used cash in operations of \$1,833,000 and had a stockholders' deficit of \$1,524,000 as of that date. These factors raise substantial doubt about the Company's ability to continue as a going concern. The ability of the Company to continue as a going concern is dependent upon the Company's ability to raise additional funds and implement its business plan. The financial statements do not include any adjustments that might be necessary if the Company is unable to continue as a going concern.

In addition, the Company's independent registered public accounting firm, in its report on the Company's December 31, 2018 financial statements, has raised substantial doubt about the Company's ability to continue as a going concern.

At June 30, 2019, the Company had cash on hand in the amount of \$711,000. Management estimates that the current funds on hand will be sufficient to continue operations through November 2019, or, subject to actual costs incurred implementing design modifications to our AOT demonstration project described in Part I, Item 2, October 2019. Management is currently seeking additional funds, primarily through the issuance of debt and equity securities for cash to operate our business, including without limitation the expenses it will incur in connection with the license agreements with Temple; costs associated with product development and commercialization of the AOT technologies; costs to manufacture and ship the products; costs to design and implement an effective system of internal controls and disclosure controls and procedures; costs of maintaining our status as a public company by filing periodic reports with the SEC and costs required to protect our intellectual property. In addition, as discussed below, the Company has substantial contractual commitments, including without limitation salaries to our executive officers pursuant to employment agreements, certain payments to a former officer and consulting fees, during the remainder of 2019 and beyond.

No assurance can be given that any future financing will be available or, if available, that it will be on terms that are satisfactory to the Company. Even if the Company is able to obtain additional financing, it may contain undue restrictions on our operations, in the case of debt financing or cause substantial dilution for our stockholders in case of equity financing.

Basic and Diluted Income (loss) per share

Our computation of earnings per share ("EPS") includes basic and diluted EPS. Basic EPS is measured as the income (loss) available to common stockholders divided by the weighted average common shares outstanding for the period. Diluted income (loss) per share reflects the potential dilution, using the treasury stock method, that could occur if securities or other contracts to issue common stock were exercised or converted into common stock or resulted in the issuance of common stock that then shared in the income (loss) of the Company as if they had been converted at the beginning of the periods presented, or issuance date, if later. In computing diluted income (loss) per share, the treasury stock method assumes that outstanding options and warrants are exercised and the proceeds are used to purchase common stock at the average market price during the period. Options and warrants may have a dilutive effect under the treasury stock method only when the average market price of the common stock during the period exceeds the exercise price of the options and warrants. Potential common shares that have an antidilutive effect (i.e., those that increase income per share or decrease loss per share) are excluded from the calculation of diluted EPS.

Income (loss) per common share is computed by dividing net income (loss) by the weighted average number of shares of common stock outstanding during the respective periods. Basic and diluted (loss) per common share is the same for periods in which the Company reported an operating loss because all warrants and stock options outstanding are anti-dilutive. At June 30, 2019 and 2019, we excluded the outstanding securities summarized below, which entitle the holders thereof to acquire shares of common stock as their effect would have been anti-dilutive.

	June 30, 2019	June 30, 2018
Options	39,450,603	37,301,300
Warrants	25,713,204	5,006,355
Common stock issuable upon conversion of notes payable	12,784,543	5,287,502
Total	<u>77,948,350</u>	<u>47,595,157</u>

Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Significant estimates include those related to accruals for potential liabilities, assumptions used in valuing equity instruments issued for financing and services and realization of deferred tax assets, among others. Actual results could differ from those estimates.

Revenue Recognition Policy

Under its business plan, the Company anticipates the leasing of its primary technology. The Company will recognize lease revenue ratably over the life of the lease upon commencement of the lease. Revenue on future product sales will be recognized in accordance with Accounting Standards Update (ASU) No. 2014-09, Revenue from Contracts with Customers. ASU 2014-09 is a comprehensive revenue recognition standard that supersedes nearly all existing revenue recognition guidance under current U.S. GAAP and replaces it with a principle-based approach or determining revenue recognition. ASU 2014-09 will require that companies recognize revenue based on the value of transferred goods or services as they occur in the contract. The ASU also will require additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract.

Research and Development Costs

Research and development costs are expensed as incurred and consist primarily of fees paid to consultants and outside service providers, and other expenses relating to the acquisition, design, development and testing of the Company's products. Certain research and development activities are incurred under contract. In those instances, research and development costs are charged to operations ratably over the life of the underlying contracts, unless the achievement of milestones, the completion of contracted work, or other information indicates that a different expensing schedule is more appropriate. Payments made pursuant to research and development contracts are initially recorded as advances on research and development contract services in the Company's consolidated balance sheet and then charged to research and development costs in the Company's consolidated statement of operations as those contract services are performed.

In January 2019, the Company paid \$500,000 as a deposit under terms of a work order for work to be performed by a pipeline operator. During the period ended June 30, 2019, the Company amortized \$450,000 of such amount as a research and development cost based on the progress of work performed as required by the contract, and has reflected the \$50,000 remaining amount as Prepaid expenses and other current assets in the accompanying consolidated balance sheet as of June 30, 2019.

For the six-month periods ended June 30, 2019 and 2018 research and development costs were \$583,000 and \$95,000, respectively. For the three-month periods ended June 30, 2019 and 2018 research and development costs were \$432,000 and \$48,000, respectively.

Patent Costs

Patent costs consist of patent-related legal and filing fees. Due to the uncertainty associated with the successful development of our AOT and Joule Heat products, all patent costs are expensed as incurred. During the six-month periods ended June 30, 2019 and 2018, patent costs were \$9,000 and \$12,000, respectively, which is included as part of operating expenses in the accompanying consolidated statements of operations.

Recent Accounting Pronouncements

Recent accounting pronouncements issued by the FASB, including its Emerging Issues Task Force, the American Institute of Certified Public Accountants, and the Securities and Exchange Commission did not or are not believed by management to have a material impact on the Company's present or future consolidated financial statement presentation or disclosures.

3. Accrued Expenses and Accounts Payable

Accrued Expenses

As of June 30, 2019 and December 31, 2018, the Company owed \$267,000 and \$327,000, respectively, pursuant to a separation agreement with a former executive officer effective April 1, 2017 as amended by letter agreements dated effective August 16, 2018 and March 31, 2019 which included as part of Accrued expenses and accounts payable on the accompanying balance sheet. The amount is to be repaid at an amount of \$10,000 per month.

Accrued Expenses and Accounts Payable – Related Parties

Accrued expense – related parties consists of accrued current salaries of officers and fees due to members of the Board of Directors. As of June 30, 2019, and December 31, 2018, accrued expenses and accounts payable to related parties amounted to \$0 and \$55,000, respectively.

4. Property and Equipment

At June 30, 2019 and December 31, 2018, property and equipment consists of the following:

	June 30, 2019	December 31, 2018
Office equipment	\$ 30,000	\$ 30,000
Furniture and fixtures	5,000	5,000
Testing Equipment	37,000	37,000
Leasehold Improvements	25,000	25,000
Subtotal	97,000	97,000
Less accumulated depreciation	(76,000)	(73,000)
Total	<u>\$ 21,000</u>	<u>\$ 24,000</u>

Depreciation expense for the six-month periods ended June 30, 2019 and 2018 was \$3,000 and \$17,000, respectively. Depreciation expense for the three-month periods ended June 30, 2019 and 2018 was \$1,000 and \$9,000, respectively.

5. Convertible Notes

	June 30, 2019 (unaudited)	December 31, 2018
Balance due on convertible notes	\$ 1,073,000	\$ 1,886,000
Accrued interest	151,000	123,000
Subtotal	1,224,000	2,009,000
Convertible note discount	(369,000)	(1,100,000)
Balance on convertible notes, net of note discounts	<u>\$ 855,000</u>	<u>\$ 909,000</u>

The Company issues convertible notes in exchange for cash. The notes typically do not bear any interest; however, there is an implied interest rate of 10% since the notes are typically issued at a 10% discount. The notes are unsecured, and usually mature twelve months from issuance.

The notes are convertible at the option of the note holder into the Company's common stock at a conversion price stipulated in the conversion agreement. In addition, the note holders receive warrants to purchase shares of common stock that are fully vested and will expire in one year from the date of issuance. As a result, the Company records a note discount to account for the relative fair value of the warrants, the notes' beneficial conversion feature or BCF, and original issue discount of 10% (OID). The note discounts are amortized over the term of the notes or amortized in full upon its conversion to common stock.

As of December 31, 2018, total outstanding notes payable amounted to \$1,886,000 which are due through December 2019 and unamortized note discount of \$1,100,000.

During the six-month period ended June 30, 2019, the Company issued similar convertible promissory notes in the aggregate of \$1,230,000 for cash of \$1,118,000 or a discount of \$112,000. The notes do not bear any interest; however, the implied interest rate used was 10% since the notes were issued 10% less than its face value. The notes are unsecured, mature in twelve months from issuance and convertible at \$0.05 to \$0.15 per share. In addition, the Company also granted these note holders warrants to purchase 9.0 million shares of the Company's common stock. The warrants are fully vested, exercisable at \$0.05 to \$0.15 per share and will expire in one year. As a result, the Company recorded a note discount of \$1,118,000 to account for the relative fair value of the warrants, the notes' beneficial conversion feature (BCF), and original issue discount (OID). The note discounts are being amortized over the term of the note or amortized in full upon the conversion to common stock. During the six-month period ended June 30, 2019 notes payable of \$2,045,000 were converted into 38,406,486 shares of common stock.

As of June 30, 2019, total outstanding notes payable amounted to \$1,073,000, accrued interest of \$151,000 and unamortized note discount of \$369,000 for a net balance of \$855,000. A total of nine notes in the aggregate of \$491,000 have reached maturity and are past due.

6. Research and Development

The Company constructs, develops and tests the AOT technologies with internal resources and through the assistance of various third-party entities. Costs incurred and expensed include fees such as license fees, prototype equipment fabrication and installation, purchase of test equipment, pipeline pumping equipment, crude oil tank batteries, viscometers, SCADA systems, computer equipment, payroll and other related equipment and various logistical expenses for the purposes of evaluating and testing the Company's AOT prototypes.

Costs incurred for research and development are expensed as incurred. Purchased materials that do not have an alternative future use are also expensed. Furthermore, costs incurred in the construction of prototypes with no certainty of any alternative future use and established commercial uses are also expensed.

For the six-month periods ended June 30, 2019 and 2018, our research and development expenses were \$583,000 and \$95,000 respectively. For the three-month periods ended June 30, 2019 and 2018, our research and development expenses were \$432,000 and \$48,000 respectively.

AOT Product Development and Testing

The Company constructs, develops and tests the AOT technologies with internal resources and through the assistance of various third-party entities. Costs incurred and expensed include fees such as prototype equipment fabrication and installation, testing fees, purchase of test equipment, pipeline pumping equipment, crude oil tank batteries, viscometers, SCADA systems, computer equipment, payroll and other related equipment and various logistical expenses for the purposes of evaluating and testing the Company's AOT prototypes.

During the six-month periods ended June 30, 2019 and 2018, the Company incurred total expenses of \$489,000 and \$1,000, respectively, in the manufacture, delivery and testing of the AOT prototype equipment. During the three-month periods ended June 30, 2019 and 2018, the Company incurred total expenses of \$384,000 and \$1,000, respectively, in the manufacture, delivery and testing of the AOT prototype equipment. Included in this amount, were costs related to a \$500,000 work order for work to be performed by a pipeline operator. During the period ended June 30, 2019, the Company amortized \$450,000 of such amount as a research and development cost based on the progress of work performed as required by the contract, and has reflected the \$50,000 remaining amount as Prepaid expenses and other current assets in the accompanying consolidated balance sheet as of June 30, 2019. There were no such expenses for the comparable period in 2018.

Temple University Licensing Agreement

On August 1, 2011, the Company and Temple University ("Temple") entered into two (2) Exclusive License Agreements (collectively, the "License Agreements") relating to Temple's patent applications, patents and technical information pertaining to technology associated with an electric and/or magnetic field assisted fuel injector system (the "First Temple License"), and to technology to reduce crude oil viscosity (the "Second Temple License"). The License Agreements are exclusive, and the territory licensed to the Company is worldwide and replace previously issued License Agreements.

Pursuant to the two licensing agreements, the Company paid Temple a non-refundable license maintenance fee of \$300,000 and agreed to pay (i) annual maintenance fees of \$187,500; (ii) royalty fee ranging from 4% up to 7% from revenues generated from the licensing agreements; and (iii) 25% of all revenues generated from sub-licensees to secure or maintain the sub-license or option thereon. The term of the licenses commenced in August 2011 and will expire upon expiration of the patents. The agreements can also be terminated by either party upon notification under terms of the licensing agreements or if the Company ceases the development of the patent or fails to commercialize the patent rights.

Total expenses recognized during each six-month periods ended June 30, 2019 and 2018 pursuant to these two License Agreements amounted to \$94,000 and \$94,000, respectively. Total expenses recognized during each three-month periods ended June 30, 2019 and 2018 pursuant to these two License Agreements amounted to \$47,000 and \$47,000, respectively. Total expenses have been reflected in Research and Development expenses on the accompanying consolidated statements of operations. In the six-month periods ended June 30, 2019 and 2018, the Company also recognized penalty interest on past-due balances of \$33,000 and \$26,000, respectively, which is included as part of interest and financing expense in the accompanying statements of operations.

As of June 30, 2019 and December 31, 2018, total unpaid fees due to Temple pursuant to these agreements are \$1,137,000 and \$1,073,000, respectively, which are included as part of Accounts Payable – license agreements in the accompanying consolidated balance sheets. With regards to the unpaid fees to Temple, a total of \$135,000 are deferred until such time the Company achieves a revenue milestone of \$835,000 or upon termination of the licensing agreements and the remaining \$1,002,000 are deemed past due. The Company is currently in negotiations with Temple to settle or cure the past due balance.

No revenues were earned from the two License Agreements during the six-month periods ended June 30, 2019 and June 30, 2018.

7. Common Stock

During the six months ended June 30, 2019, the Company issued 42,333,676 shares of its common stock as follows:

- The Company issued 38,406,486 shares of its common stock upon the conversion of \$2,045,000 in convertible notes pursuant to the convertible notes conversion prices of \$0.05 to \$0.15 per share.
- The Company issued 3,138,993 shares of its common stock upon the exercise of warrants for proceeds of \$202,000 at exercise prices of \$0.05 to \$0.18 per share.
- The Company issued 538,197 shares of its common stock upon the exercise of options for proceeds of \$71,000 at exercise prices of \$0.08 to \$0.18 per share.
- The Company issued 250,000 shares of its common stock in exchange for \$68,000 for services valued at \$0.27 per share.

8. Stock Options and Warrants

The Company periodically issues stock options and warrants to employees and non-employees in capital raising transactions, for services and for financing costs. Options vest and expire according to terms established at the grant date.

Options

Options vest according to the terms of the specific grant and expire from 2 to 10 years from date of grant. The weighted-average, remaining contractual life of employee and non-employee options outstanding at June 30, 2019 was 5.2 years. Stock option activity for the period January 1, 2019 up to June 30, 2019, was as follows:

	Options	Weighted Avg. Exercise Price
January 1, 2019	35,301,300	\$ 0.22
Granted	4,687,500	0.08
Exercised	(538,197)	0.13
Forfeited	–	–
June 30, 2019	<u>39,450,603</u>	<u>\$ 0.20</u>

The weighted average exercise prices, remaining contractual lives for options granted, exercisable, and expected to vest as of June 30, 2019 were as follows:

Option Exercise Price Per Share	Outstanding Options			Exercisable Options		
	Shares	Life (Years)	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price	
\$0.05 - \$0.24	17,915,553	8.0	\$ 0.10	15,702,013	\$ 0.10	0.10
\$0.25 - \$0.49	20,913,552	2.8	0.27	20,913,552		0.27
\$0.50 - \$0.99	471,052	4.8	0.85	471,052		0.85
\$1.00 - \$2.00	150,446	4.1	1.18	150,446		1.18
	<u>39,450,603</u>	5.2	\$ 0.20	<u>37,237,063</u>	\$	0.21

During the six-month period ending June 30, 2019, and pursuant to the Company's Board Compensation policy approved by the Board June 19, 2015, the Company granted options to purchase 4,687,500 shares of common stock to members of the Company's Board of Directors. The options are exercisable at \$0.08 share, vest monthly over a twelve-month period, and expire ten years from the date granted. Total fair value of these options at grant date was \$328,000 using the Black-Scholes Option Pricing model with the following assumptions: life of 5 years; risk free interest rate of 2.5%; volatility of 122% and dividend yield of 0%.

During the six-month periods ended June 30, 2019 and 2018, the Company recognized compensation costs based on the fair value of options that vested of \$183,000 and \$535,000 respectively. During the three-month periods ended June 30, 2019 and 2018, the Company recognized compensation costs based on the fair value of options that vested of \$85,000 and \$102,000 respectively.

At June 30, 2019, the Company's closing stock price was \$0.24 per share. The aggregate intrinsic value of the options outstanding at June 30, 2019 was \$2,553,000. Future unamortized compensation expense on the unvested outstanding options at June 30, 2019 is approximately \$164,000 to be recognized through December 2019.

Warrants

The following table summarizes certain information about the Company's stock purchase warrants activity for the period starting January 1, 2019 up to June 30, 2019.

	Warrants	Weighted Avg. Exercise Price
January 1, 2019	21,055,355	\$ 0.09
Granted	9,099,204	0.08
Exercised	(3,138,993)	0.07
Cancelled	(1,302,362)	0.19
June 30, 2019	<u>25,713,204</u>	<u>\$ 0.08</u>

The weighted average exercise prices, remaining contractual lives for warrants granted, exercisable, and expected to vest as of June 30, 2019 were as follows:

Warrant Exercise Price Per Share	Outstanding Warrants			Exercisable Warrants		
	Shares	Life (Years)	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price	
\$0.05 - \$0.24	23,643,204	0.6	\$ 0.06	23,577,204	\$ 0.06	0.06
\$0.25 - \$0.49	2,000,000	2.3	0.30	2,000,000	0.30	0.30
\$0.50 - \$1.00	70,000	4.8	0.80	70,000	0.80	0.80
	<u>25,713,204</u>	0.7	\$ 0.08	<u>25,647,204</u>	\$ 0.08	0.08

In the six-month period ending June 30, 2019, pursuant to terms of convertible notes issued, the Company granted warrants to purchase 8,999,205 shares of common stock with an exercise price of \$.05 to \$0.18 per share, vesting immediately upon grant and expiring one year from the date of grant (see Note 5, above).

In the six-month period ending June 30, 2019, the Company issued warrants to purchase 99,999 shares of common stock with an exercise price of \$0.24 per share, vesting over three months and expiring two years from the date of grant as compensation under an independent consulting agreement. Total fair value of the warrants at grant date was \$17,000 using the Black-Scholes model with the following assumptions: life of 2.3 years; risk free interest rate of 1.75%; volatility of 153% and dividend yield of 0%.

During the six-month period ended June 30, 2019, warrants to acquire 3,138,993 shares of common stock were exercised resulting in net proceeds to the Company of \$202,000.

At June 30, 2019, the aggregate intrinsic value of the warrants outstanding was \$4,231,000.

9. Commitments and Contingencies

There is no current or pending litigation of any significance with the exception of the matters that have arisen under, and are being handled in, the normal course of business.

10. Subsequent Events

Conversion of Convertible Notes

From July 1, 2019 up to August 13, 2019, Company issued 329,560 shares of common stock upon conversion of previously issued convertible notes in aggregate value of \$50,000.

Exercise of Warrants

From July 1, 2019 up to August 13, 2019, Company issued 362,500 shares of common stock upon the exercise of previously issued warrants for aggregate cash proceeds of \$19,000.

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with the Consolidated Financial Statements and supplementary data referred to in this Form 10-Q.

This discussion contains forward-looking statements that involve risks and uncertainties. Such statements, which include statements concerning future revenue sources and concentration, selling, general and administrative expenses, research and development expenses, capital resources, additional financings and additional losses, are subject to risks and uncertainties, including, but not limited to, those discussed elsewhere in this Form 10-Q, and in the "Risk Factors" section filed with the SEC on April 1, 2019, that could cause actual results to differ materially from those projected. Unless otherwise expressly indicated, the information set forth in this Form 10-Q is as of June 30, 2019, and we undertake no duty to update this information.

Overview

QS Energy, Inc. ("QS Energy" or "Company" or "we" or "us" or "our") develops and commercializes energy efficiency technologies that assist in meeting increasing global energy demands, improving the economics of oil transport, and reducing greenhouse gas emissions. The Company's intellectual properties include a portfolio of domestic and international patents and patents pending, a substantial portion of which have been developed in conjunction with and exclusively licensed from Temple University of Philadelphia, PA ("Temple"). QS Energy's primary technology is called Applied Oil Technology (AOT), a commercial-grade crude oil pipeline transportation flow-assurance product. Engineered specifically to reduce pipeline pressure loss, increase pipeline flow rate and capacity, and reduce shippers' reliance on diluents and drag reducing agents to meet pipeline maximum viscosity requirements, AOT is a 100% solid-state system that reduces crude oil viscosity by applying a high intensity electrical field to crude oil while in transit. AOT technology delivers reductions in crude oil viscosity and pipeline pressure loss as demonstrated in independent third-party tests performed by the U.S. Department of Energy, the PetroChina Pipeline R&D Center, and ATS RheoSystems, a division of CANNON™, at full-scale test facilities in the U.S. and China, and under commercial operating conditions on one of North America's largest high-volume crude oil pipelines. Prior testing on a commercial crude oil condensate pipeline demonstrated high correlation between laboratory analysis and full-scale AOT operations under commercial operating conditions with onsite measurements and data collected by the pipeline operator on its supervisory control and data acquisition ("SCADA") system. The AOT product has transitioned from laboratory testing and ongoing research and development to initial production and continued testing in advance of our goal of seeking commercial acceptance and adoption by the upstream and midstream pipeline marketplace. We continue to devote the bulk of our efforts to the promotion, design, testing and the commercial manufacturing and operations of our crude oil pipeline products in the upstream and midstream energy sector. We anticipate that these efforts will continue during 2019.

Our Company was incorporated on February 18, 1998, as a Nevada Corporation under the name Mandalay Capital Corporation. The Company changed its name to Save the World Air, Inc. on February 11, 1999. Effective August 11, 2015, the Company changed its name to QS Energy, Inc. The name change was affected through a short-form merger pursuant to Section 92A.180 of the Nevada Revised Statutes. Additionally, QS Energy Pool, Inc., a California corporation, was formed as a wholly-owned subsidiary of the Company on July 6, 2015 to serve as a vehicle for the Company to explore, review and consider acquisition opportunities. To date, QS Energy Pool has not entered into any acquisition transaction. However, the Company will still consider entering into potential beneficial acquisitions. The Company is considering dissolving QS Energy Pool to reduce costs associated with operating this subsidiary. The Company's common stock is quoted under the symbol "QSEP" on the Over-the-Counter Bulletin Board. More information including the Company's fact sheet, logos and media articles are available at our corporate website, www.qsenergy.com.

Between 2011 and 2012, the Company transitioned from prototype testing of its AOT technology at the U.S. Department of Energy Rocky Mountain Oilfield Testing Center, Midwest, Wyoming ("RMOTC"), to the design and production of full-scale commercial prototype units. The Company worked in a collaborative engineering environment with multiple energy industry companies to refine the AOT Midstream commercial design to comply with the stringent standards and qualification processes as dictated by independent engineering audit groups and North American industry regulatory bodies. In May 2013, the Company's first commercial prototype unit known as AOT Midstream, was completed.

In 2013, the Company entered into an Equipment Lease/Option to Purchase Agreement (“TransCanada Lease”) with TransCanada Keystone Pipeline, L.P. by its agent TC Oil Pipeline Operations, Inc. (“TransCanada”) which agreed to lease and test the effectiveness of the Company’s AOT technology and equipment on one of TransCanada’s operating pipelines. As previously reported in our 10-K report filed with the SEC on March 16, 2015, in June 2014, the equipment was accepted by TransCanada and the lease commenced and the first full test of the AOT equipment on the Keystone pipeline was performed in July 2014 by Dr. Rongjia Tao of Temple University, with subsequent testing performed by an independent laboratory, ATS RheoSystems, a division of CANNON™ (“ATS”) in September 2014. Upon review of the July 2014 test results and preliminary report by Dr. Tao, QS Energy and TransCanada mutually agreed that this initial test was flawed due to, among other factors, the short-term nature of the test, the inability to isolate certain independent pipeline operating factors such as fluctuations in upstream pump station pressures, and limitations of the AOT device to produce a sufficient electric field to optimize viscosity reduction. Subsequent testing by ATS in September 2014 demonstrated viscosity reductions of 8% to 23% depending on flow rates and crude oil types in transit. In its summary report, ATS concluded that i) data indicated a decrease in viscosity of crude oil flowing through the TransCanada pipeline due to AOT treatment of the crude oil; and ii) the power supply installed on our equipment would need to be increased to maximize reduction in viscosity and take full advantage of the AOT technology. While more testing is required to establish the commercial efficacy of our AOT technology, we are encouraged by the findings of these field tests performed under commercial operating conditions. The TransCanada Lease was terminated by TransCanada, effective October 15, 2014. Upon termination of the TransCanada Lease, all equipment was uninstalled, returned, inspected and configured for re-deployment.

On July 15, 2014, the Company entered into an Equipment Lease/Option to Purchase Agreement (“Kinder Morgan Lease”) with Kinder Morgan Crude & Condensate, LLC (“Kinder Morgan”) under which Kinder Morgan agreed to lease and test the effectiveness of the Company’s AOT technology and equipment on one of Kinder Morgan’s operating crude oil condensate pipelines. Equipment provided under the Lease includes a single AOT Midstream pressure vessel with a maximum flow capacity of 5,000 gallons per minute. The equipment was delivered to Kinder Morgan in December 2014 and installed in March 2015. In April 2015, during pre-start testing, low electrical impedance was measured in the unit, indicating an electrical short. A replacement unit was installed May 2015. The second unit also presented with low impedance when flooded with crude condensate from Kinder Morgan’s pipeline. Subsequent to design modifications, a remanufactured AOT unit was installed and tested at Kinder Morgan’s pipeline facility in August 2015. Initial results were promising, with the unit operating generally as expected. However, voltage dropped as preliminary tests continued, indicating decreased impedance within the AOT pressure vessel. QS Energy personnel and outside consultants performed a series of troubleshooting assessments and determined that, despite modifications made to the AOT, conductive materials present in the crude oil condensate appeared to be the root cause of the decreased impedance. Based on these results, QS Energy and Kinder Morgan personnel mutually agreed to put a hold on final acceptance of equipment under the lease and suspended in-field testing to provide time to re-test crude oil condensate in a laboratory setting, and thoroughly review and test selected AOT component design and fabrication. Subsequent analysis and testing led to changes in electrical insulation, inlet flow improvements and other component modifications. These design changes were implemented and tested by Industrial Screen and Maintenance (ISM), one of QS Energy’s supply chain partners in Casper, Wyoming. Tests performed by ISM at its Wyoming facility indicated significant improvements to system impedance and efficiency of electric field generation.

In February 2016, the modified AOT equipment was installed at Kinder Morgan’s facility. Pre-acceptance testing was performed in April 2016, culminating in more than 24 hours of continuous operations. In-field viscosity measurements and pipeline data collected during this test indicated the AOT equipment operated as expected, demonstrating viscosity reductions equivalent to those measured under laboratory conditions. Supervisory Control And Data Acquisition (“SCADA”) pipeline operating data collected by Kinder Morgan during this test indicated a pipeline pressure drop reduction consistent with expectations. Results of this test were promising, however due to the short duration of the test and limited data collection, definitive conclusions regarding the AOT performance and its impact on pipeline operations could not be reached. Based on final analysis of in-field test results, SCADA operating data and subsequent analysis of crude oil condensate samples at Temple University, it is unlikely Kinder Morgan would use the AOT at the original test location or other condensate pipeline. Kinder Morgan has expressed interest in AOT operations at one of their heavy crude pipeline locations subject to results of other AOT demonstration projects and has provided the Company with additional crude oil samples which have been tested at Temple University for future test correlation and operational planning purposes. The Kinder Morgan Lease is currently in suspension and lease payments have not yet commenced.

Southern Research Institute (SRI) was engaged by QS Energy in 2015 to investigate the root cause of the crude oil condensate impedance issue by replicating conditions experienced in the field utilizing a laboratory-scaled version of the AOT and crude oil condensate samples provided by Kinder Morgan. In addition, QS Energy retained an industry expert petroleum pipeline engineer to review the AOT design and suggest design modifications to resolve the crude oil condensate impedance issue. This engineer has studied design details, staff reports and forensic photographs of each relevant AOT installation and test. Based on these investigations, specific modifications were proposed to resolve the impedance issue, and improve the overall efficiency of the AOT device, resulting in a new value-engineered design of certain AOT internal components.

During the third quarter 2016, the Company developed an onsite testing program to demonstrate AOT viscosity reduction at prospective customer sites. This program utilized a laboratory-scale AOT device designed and developed by the Company and tested at the Southern Research Institute. Under this program, Company engineers set up a temporary lab at the customer's site to test a full range of crude oils. Fees charged for providing this service were dependent on scope of services, crude oil sample to be tested, and onsite time requirements. In the fourth quarter 2016, the Company entered a contract to provide these onsite testing services to a North American oil producer and pipeline operator over a one-week period in early 2017 at a fixed price of \$50,000. This test was performed in January 2017; data analysis and final report was completed in March 2017. Test results demonstrated viscosity reduction under limited laboratory conditions. The oil producer has since requested access to observe a full-scale demonstration facility and view operating data when they become available.

In 2014, the Company began development of a new suite of products based around the new electrical heat system which reduces oil viscosity through a process known as joule heat ("Joule Heat"). The Company built and tested its first Joule Heat prototype in June 2015. The system was operational; however, changes to the prototype configuration will be required to determine commercial effectiveness of this unit. In December 2015, we suspended Joule Heat development activities to focus Company resources on finalizing commercial development of the AOT. We plan to resume Joule Heat development in the future depending on the availability of sufficient capital and other resources.

In July 2017, the Company filed for trademark protection for the word "eDiluent" in advance of rolling out a new marketing and revenue strategy based on the concept of using AOT to reduce pipeline dependence upon diluent to reduce viscosity of crude oils. A primary function of AOT is to reduce viscosity by means of its solid-state electronics technology, in essence providing an electronic form of diluent, or "eDiluent". The Company plans to market and sell a value-added service under the name eDiluent, designed to be upsold by the Company's midstream pipeline customers in an effort to provide the Company with long-term recurring revenues.

During the third quarter 2017, the Company built a dedicated laboratory space at its Tomball Texas facility, and now has the capability to perform onsite testing utilizing our laboratory-scale AOT device, among other equipment. Development of an AOT unit for use in crude oil upstream and gathering operations was restarted in September 2017 utilizing resources at the Tomball facility, and the Company plans to resume Joule Heat development in the future depending on the availability of sufficient capital and other resources. Also, during the third quarter 2017, the Company built an outdoor facility at its Tomball Texas facility for onsite storage of AOT inventory and other large equipment. The Tomball facility is owned by the Company's CEO as described in our Form 10-K filed with the SEC on April 1, 2019.

Throughout 2018 our primary strategic goal was focused on installing and operating a demonstration AOT project on a commercial crude oil pipeline. Much of our time was spent meeting with industry executives and engineers in North and South America and working with local representatives in the Asian and the Middle Eastern markets. In December 2018, we reached mutual agreement with a major U.S.-based pipeline operator on a demonstration project under which we will install and operate our AOT equipment on a crude oil pipeline located in the Southern United States in 2019. We believe the selected project site should be ideal for demonstration purposes, delivering heavy crudes which, based on samples tested at Temple University, and, subject to the discussion below, should experience significant viscosity reduction when treated with our AOT technology.

While management focused on finding a partner and finalizing terms of the demonstration project, and in our continuing efforts to commercialize our AOT technology, our engineering team worked throughout 2018 to prepare one of our inventoried AOT units for deployment. All system upgrade, inspections and testing protocols were completed in December 2018. The pipeline operator finalized site selection and began site design and engineering in January 2019, completing site preparation and equipment installation in June 2019. The project was installed within budget, quality compliant, and without safety incidents. The system passed the pre-start safety review, data acquisition signal verifications, and mechanical inspections. Under full crude oil flow, the system was confirmed to have no leaks and no environmental issues were noted. Data collected during the full-flow startup phase confirmed internal differential pressures to be negligible and consistent with design specifications. However, when the system was energized, and the unit was run-up to high-voltage operations, the primary power supply began to operate erratically and had to be taken offline. Subsequent inspection determined the primary power supply had failed.

After removing the primary power supply, our engineers reconfigured the system to run off a smaller secondary power supply. Although this unit was not capable of achieving target treatment voltage, we performed limited testing and troubleshooting measures, after which the damaged power supply was shipped to the manufacturer for expedited repair and reconditioning; a process expected to take approximately 4-6 weeks. Inspections performed during the repair process indicated internal components had been physically damaged. Though not definitive, it appears that damage may have occurred during transit prior to initial installation at the demonstration site. Repairs were completed in early August 2019 and have been shipped to the site for installation.

While the demonstration project was offline for power supply repairs, our engineering team worked with oil samples pulled from the operating pipeline for testing at our Tomball laboratory facility. These tests were designed to confirm our target power requirements as accurately as possible and help us fine-tune enhancements planned for a new optimized AOT internal grid pack design we plan to test at the demonstration site as part of our continuing value engineering effort.

During initial testing with the small power supply current draw was greater than prior field deployments. While it was expected that the small power supply would not achieve treatment voltage, as voltage was increased, actual current draw experienced under test conditions exceeded the operating limit of the power supply. This was an unexpected result. Initial concerns were the potential for current leakage inside the AOT and water in the treatment cell of the AOT.

We performed an engineering review of drawings to look for possible leakage pathways, but none were indicated. We conducted electrical testing and could not find any shorts from the anode to the chassis or to the cathode. With this, and other tests performed onsite, we believe the unit does not have an electrical issue.

After the AOT passed all testing, unit was put online with full crude oil flow established. The constant flow of oil would allow any water that may have accumulated in the AOT to be flushed out of the system. Oil samples were also obtained for testing at the Company's laboratory in Tomball, Texas.

Subsequent laboratory testing performed at our Tomball facility showed the electrical conductivity of the oil to be quite high and in line with field observations. This is further indication that the unit is likely functioning properly and does not have a current leak. It was decided to return to the field and test the AOT and obtain new samples for lab testing to verify previous results. During the field test we were able to verify the high conductivity. We believe this eliminated the possibility the original result was due to water in the cell. We are continuing to test new samples in the lab, but all tests performed to-date indicate high conductivity.

Repairs to the power supply were completed in early August 2019. We plan to install the repaired power supply and test the AOT unit at higher power in August 2019; however, based on recent laboratory tests, we expect conductivity of the crude oil to inhibit the AOT's ability to reach sufficient voltage to fully treat the crude oil. We are also working with the power supply vendor to assess power supply configurations to increase the power output and to match a new power supply to the design of a new grid pack and the target oil. We are also working on modifications to the internal configuration of the AOT grid pack to reduce power requirements when treating highly conductive crude oil. Once we complete the next round of full-scale testing at the demonstration site, we will determine if modifications are required. Our next course of action will be determined at that time. Based on current plans, required modifications, if any, should be installed and ready for testing in the fourth quarter of 2019.

Once the corrective actions discussed above are achieved, our plans moving forward are centered on achieving commercial adoption of our AOT device. Over the past year, we have met with many industry executives who expressed interest in AOT subject to seeing and evaluating commercial operations and data. Assuming successful operations, we believe the demonstration AOT project should provide data requested such as real-time changes in viscosity, pipeline pressure drop reduction and increases in pipeline operating flowrates. All collected data will be normalized such that it can be used to evaluate the financial and operational benefits across a wide range of commercial operating scenarios without disclosing confidential details of our demonstration partner's operations. We believe that real-world data from our demonstration AOT project may be used to accelerate our desire to achieve commercial adoption of our AOT technology, positioning us to re-engage with industry executives, targeting sales in 2020.

The Company is currently pursuing AOT testing in several countries in South America related to upstream, midstream, barge, and tanker truck applications. Oil samples from multiple clients have been shipped from South America for testing at Temple University. There is a vast amount of heavy oil in these countries and we believe the Ministers of Hydrocarbons have standing orders to increase production and transportation capacity. We are also in discussions with an exploration and production company regarding AOT operations on a West Coast heavy crude gathering line that relies heavily on diluent to achieve required viscosity. This project could be designed to demonstrate AOT for upstream and trucking applications. We continued work with an existing client in Asia on a potential AOT demonstration project; however, progress on this project slowed from our original targets. In August 2018, we were informed by our Asian client the project would be suspended and reassessed in 2019 subject to budget and project approval requirements imposed by new management. In August 2018, we were approached by a prospective customer with operations in Russia and other regions in the former Soviet Union with expressed interest in receiving a proposal to install AOTs on a new 2,000 km pipeline. We are maintaining communications with energy companies in Europe and the Middle East as we seek to finalize AOT demonstration project operations. Our ability to do business in some of these and other potential target markets, specifically including Russia, China and Venezuela are now, or may in be future become, restricted or impacted by sanctions, tariffs and other government actions imposed by the United States or foreign governments.

Our expenses to date have been funded through the sale of shares of common stock and convertible debt, as well as proceeds from the exercise of stock purchase warrants and options. We will need to raise substantial additional capital through 2019, and beyond, to fund our sales and marketing efforts, continuing research and development, and certain other expenses, until we are able to achieve a revenue base.

There are significant risks associated with our business, our Company and our stock. See Part II Item 1A, "Risk Factors," below.

I. Six months ended June 30, 2019 and 2018

Results of Operations for six months ended June 30, 2019 and 2018

	2019	Six months ended June 30, 2018	Change
Revenues	\$ —	\$ —	\$ —
Costs and Expenses			
Operating expenses	1,133,000	956,000	177,000
Research and development expenses	583,000	95,000	488,000
Loss before other income (expense)	(1,716,000)	(1,015,000)	(665,000)
Other income (expense)			
Interest and financing expense	(2,024,000)	(407,000)	(1,617,000)
Net Loss	<u>\$ (3,740,000)</u>	<u>\$ (1,458,000)</u>	<u>\$ (2,282,000)</u>

Operating expenses were \$1,133,000 for the six-month period ended June 30, 2019, compared to \$956,000 for the six-month period ended June 30, 2018, an increase of \$177,000. This is due to a decrease in non-cash expenses of \$10,000 and an increase in cash expenses of \$187,000. Specifically, the decrease in non-cash expenses is attributable to decreases in depreciation of \$14,000, and stock compensation expense attributable to options granted to employees and directors of \$62,000, offset by an increase in common stock and warrants issued as compensation for services of \$66,000. The increase in cash expense is attributable increases in consulting fees of \$18,000, freight costs of \$4,000, insurance of \$20,000, office expenses of \$33,000, legal and accounting of \$6,000, public and investor relations of \$65,000, rent and utilities of \$11,000, travel expenses of \$36,000, and other expenses of \$10,000, offset by a decrease in salaries and benefits of \$16,000.

Research and development expenses were \$583,000 for the six-month period ended June 30, 2019, compared to \$95,000 for the six-month period ended June 30, 2018, an increase of \$488,000. This increase is attributable an increase in prototype product development costs of \$488,000.

Other income and expense were \$2,024,000 expense for the six-month period ended June 30, 2019, compared to \$407,000 expense for the three-month period ended June 30, 2018, a net increase in other expenses of \$1,617,000. This increase is attributable to an increase in non-cash other expenses of \$1,617,000. The increase in non-cash other expense is due to increases in expense attributable to interest, beneficial conversion factors and warrants associated with convertible notes issued in the amount of \$1,612,000, and other non-cash interest of \$5,000.

The Company had a net loss of \$3,740,000, or \$0.01 per share, for the six-month period ended June 30, 2019, compared to a net loss of \$1,458,000, or \$0.01 per share, for the six-month period ended June 30, 2018.

II. Three months ended June 30, 2019 and 2018

	2019	Three months ended June 30 2018	Change
Revenues	\$ —	\$ —	\$ —
Costs and expenses			
Operating expenses	655,000	462,000	193,000
Research and development expenses	432,000	48,000	384,000
Loss before other income (expense)	(1,087,000)	(510,000)	(577,000)
Other income (expense)			
Interest and financing expense	(371,000)	(248,000)	(123,000)
Net Loss	<u>\$ (1,458,000)</u>	<u>\$ (758,000)</u>	<u>\$ (700,000)</u>

The Company had no revenues in the three month-periods ended June 30, 2019 and 2018.

Operating expenses were \$655,000 for the three-month period ended June 30, 2019, compared to \$462,000 for the three-month period ended June 30, 2018, an increase of \$193,000. This is due to an increase in non-cash expenses of \$54,000, and an increase in cash expenses of \$139,000. Specifically, the increase in non-cash expenses is attributable to decreases in depreciation of \$7,000, and in stock compensation expenses attributable to the fair value of options granted to directors and employees of \$17,000, offset by an increase in common stock and warrants issued as compensation for services of \$78,060. The increase in cash expense is attributable increases in consulting fees of \$18,000, freight costs of \$2,000, insurance of \$11,000, office expenses of \$19,000, legal and accounting of \$16,000, public and investor relations of \$44,000, rent and utilities of \$11,000, travel expenses of \$34,000, and other expenses of \$2,000, offset by a decrease in salaries and benefits of \$18,000.

Research and development expenses were \$432,000 for the three-month period ended June 30, 2019, compared to \$48,000 for the three-month period ended June 30, 2018, an increase of \$383,000. This decrease is attributable to decreases in prototype product development costs of \$383,000.

Other income and expense were \$371,000 expense for the three-month period ended June 30, 2019, compared to \$248,000 expense for the three-month period ended June 30, 2018, a net increase in other expenses of \$123,000. This increase is attributable to an increase in non-cash other expenses of \$123,000. The increase in non-cash other expense is due to an increase in expense attributable to interest, beneficial conversion factors and warrants associated with convertible notes issued in the amount of \$123,000.

The Company had a net loss of \$1,458,000, or \$0.00 per share, for the three-month period ended June 30, 2019, compared to a net loss of \$758,000, or \$0.00 per share, for the three-month period ended June 30, 2018.

Liquidity and Capital Resources

General

As reflected in the accompanying condensed consolidated financial statements, the Company has not yet generated significant revenues and has incurred recurring net losses. We have incurred negative cash flow from operations since our inception in 1998 and a stockholders' deficit of \$1,524,000 as of June 30, 2019. Our negative operating cash flow for the periods ended June 30, 2019 was funded primarily through issuance of convertible notes and execution of options and warrants to purchase common stock.

The accompanying condensed consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the settlement of liabilities and commitments in the normal course of business. As reflected in the accompanying condensed consolidated financial statements, the Company had a net loss of \$3,740,000 and a negative cash flow from operations of \$1,833,000 for the six-month period ended June 30, 2019. These factors raise substantial doubt about our ability to continue as a going concern.

In addition, the Company's independent registered public accounting firm, in its report on the Company's December 31, 2018 financial statements, has raised substantial doubt about the Company's ability to continue as a going concern. Our ability to continue as a going concern is dependent upon our ability to raise additional funds and implement our business plan. The consolidated financial statements do not include any adjustments that might be necessary if we are unable to continue as a going concern.

Summary

During the period ended June 30, 2019, we received cash totaling \$1,118,000 from issuance of our convertible notes payable and exercise of options and warrants to purchase common stock and used cash in operations of \$273,000. At June 30, 2019, we had cash on hand in the amount of \$711,000. We will need additional funds to operate our business, including without limitation the expenses we will incur in connection with the license agreements with Temple University; costs associated with product development and commercialization of the AOT and related technologies; costs to manufacture and ship our products; costs to design and implement an effective system of internal controls and disclosure controls and procedures; costs of maintaining our status as a public company by filing periodic reports with the SEC and costs required to protect our intellectual property. In addition, as discussed above, we have substantial contractual commitments, including without limitation salaries to our executive officers pursuant to employment agreements, certain severance payments to a former officer and consulting fees, during the remainder of 2019 and beyond.

No assurance can be given that any future financing will be available or, if available, that it will be on terms that are satisfactory to the Company.

Licensing Fees to Temple University

For details of the licensing agreements with Temple University, see Financial Statements attached hereto, Note 6 (Research and Development).

Critical Accounting Policies and Estimates

Our discussion and analysis of financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these consolidated financial statements and related disclosures requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, expenses, and related disclosure of contingent assets and liabilities. We evaluate, on an on-going basis, our estimates and judgments, including those related to the useful life of the assets. We base our estimates on historical experience and assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

The methods, estimates and judgments we use in applying our most critical accounting policies have a significant impact on the results that we report in our consolidated financial statements. The SEC considers an entity's most critical accounting policies to be those policies that are both most important to the portrayal of a company's financial condition and results of operations and those that require management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about matters that are inherently uncertain at the time of estimation. For a more detailed discussion of the accounting policies of the Company, see Note 1 of the Notes to the Condensed Consolidated Financial Statements, "Summary of Significant Accounting Policies".

We believe the following critical accounting policies, among others, require significant judgments and estimates used in the preparation of our consolidated financial statements.

Estimates

The preparation of consolidated financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Certain significant estimates were made in connection with preparing our consolidated financial statements as described in Note 1 to Notes to the Condensed Consolidated Financial Statements. Actual results could differ from those estimates.

Stock-Based Compensation

The Company periodically issues stock options and warrants to employees and non-employees in non-capital raising transactions for services and for financing costs. The Company accounts for stock option and warrant grants issued and vesting to employees based on the authoritative guidance provided by the Financial Accounting Standards Board whereas the value of the award is measured on the date of grant and recognized over the vesting period. The Company accounts for stock option and warrant grants issued and vesting to non-employees in accordance with the authoritative guidance of the Financial Accounting Standards Board whereas the value of the stock compensation is based upon the measurement date as determined at either a) the date at which a performance commitment is reached, or b) at the date at which the necessary performance to earn the equity instruments is complete. Non-employee stock-based compensation charges generally are amortized over the vesting period on a straight-line basis. In certain circumstances where there are no future performance requirements by the non-employee, option grants are immediately vested and the total stock-based compensation charge is recorded in the period of the measurement date.

The fair value of the Company's common stock option grants is estimated using the Black-Scholes Option Pricing model, which uses certain assumptions related to risk-free interest rates, expected volatility, expected life of the common stock options, and future dividends. Compensation expense is recorded based upon the value derived from the Black-Scholes Option Pricing model, and based on actual experience. The assumptions used in the Black-Scholes Option Pricing model could materially affect compensation expense recorded in future periods.

Going Concern

The accompanying consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the settlement of liabilities and commitments in the normal course of business. As reflected in the accompanying consolidated financial statements, during the six-months ended June 30, 2019, the Company incurred a net loss of \$3,740,000, used cash in operations of \$1,833,000 and had a stockholders' deficit of \$1,524,000 as of that date. These factors raise substantial doubt about the Company's ability to continue as a going concern. The ability of the Company to continue as a going concern is dependent upon the Company's ability to raise additional funds and implement its business plan. The financial statements do not include any adjustments that might be necessary if the Company is unable to continue as a going concern.

At June 30, 2019, the Company had cash on hand in the amount of \$711,000. Management estimates that the current funds on hand will be sufficient to continue operations through November 2019, or, subject to actual costs incurred implementing design modifications to our AOT demonstration project described in Part I, Item 2, October 2019. Management is currently seeking additional funds, primarily through the issuance of debt and equity securities for cash to operate our business, including without limitation the expenses it will incur in connection with the license agreements with Temple; costs associated with product development and commercialization of the AOT technologies; costs to manufacture and ship the products; costs to design and implement an effective system of internal controls and disclosure controls and procedures; costs of maintaining our status as a public company by filing periodic reports with the SEC and costs required to protect our intellectual property. In addition, as discussed below, the Company has substantial contractual commitments, including without limitation salaries to our executive officers pursuant to employment agreements, certain payments to a former officer and consulting fees, during the remainder of 2019 and beyond.

No assurance can be given that any future financing will be available or, if available, that it will be on terms that are satisfactory to the Company. Even if the Company is able to obtain additional financing, it may contain undue restrictions on our operations, in the case of debt financing or cause substantial dilution for our stockholders in case of equity financing.

Recent Accounting Policies

See Footnote 2 in the accompanying financial statements for a discussion of recent accounting policies.

Item 3. Quantitative and Qualitative Disclosure about Market Risk

We issue from time to time fixed rate discounted convertible notes. Our convertible notes and our equity securities are exposed to risk as set forth below, in Part II Item 1A, "Risk Factors." Please also see Item 2, above, "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Item 4. Controls and Procedures

1. Disclosure Controls and Procedures

The Company's management, with the participation of the Company's chief executive officer and chief financial officer, evaluated, as of June 30, 2019, the effectiveness of the Company's disclosure controls and procedures, which were designed to be effective at the reasonable assurance level. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of the Company's disclosure controls and procedures as of June 30, 2019, management, the chief executive officer and the chief financial officer concluded that the Company's disclosure controls and procedures were effective at the reasonable assurance level at that date.

(a) Changes in Internal Control over Financial Reporting

No change in the Company's internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) occurred during the six-month period ended June 30, 2019 that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings

There is no litigation of any significance with the exception of the matters that have arisen under, and are being handled in, the normal course of business.

Item 1A. Risk Factors

There have been no material changes in the risk factors previously disclosed in Form 10-K for the period ended December 31, 2018, which we filed with the SEC on April 1, 2019.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Issuances

In private offerings exempt from registration, during the six months ended June 30, 2019, the Company issued 38,406,486 shares of its common stock upon the conversion of \$2,045,000 in convertible notes at \$0.05 to \$0.15 per share. In connection with the issuances of the foregoing securities, the Company relied on the exemption, among other exemptions, from registration provided by Section 4(a)(2) of the Securities Act of 1933, as amended, for transactions not involving a public offering.

The proceeds received by the Company in connection with the above issuances of shares were used and continue to be used for general corporate purposes including without limitation the demonstration project described in Part I, Item 2.

Item 3. Defaults Upon Senior Securities

None

Item 4. Mine Safety Disclosures

None

Item 5. Other Information

None

Item 6. Exhibits

Exhibit No.	Description
31.1	Certification of Chief Executive Officer of Quarterly Report Pursuant to Rule 13(a)-15(e) or Rule 15(d)-15(e)
31.2	Certification of Chief Financial Officer of Quarterly Report pursuant to Rule 13(a)-15(e) or Rule 15(d)-15(e)
32	Certification of Chief Executive Officer and Chief Financial Officer of Quarterly Report Pursuant to 18 U.S.C. Section 1350
101.INS	XBRL Instance Document
101.SCH	XBRL Schema Document
101.CAL	XBRL Calculation Linkbase Document
101.LAB	XBRL Label Linkbase Document
101.PRE	XBRL Presentation Linkbase Document
101.DEF	XBRL Definition Linkbase Document

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has caused this Report to be signed on its behalf by the undersigned, hereunto duly authorized.

QS ENERGY, INC.

Date: August 14, 2019

By: /s/ Michael McMullen
Michael McMullen
Chief Financial Officer

EXHIBITS

Exhibit No.	Description
31.1	Certification of Chief Executive Officer of Quarterly Report Pursuant to Rule 13(a)-15(e) or Rule 15(d)-15(e)
31.2	Certification of Chief Financial Officer of Quarterly Report Pursuant to Rule 13(a)-15(e) or Rule 15(d)-15(e)
32	Certification of Chief Executive Officer and Chief Financial Officer of Quarterly Report Pursuant to 18 U.S.C. Section 1350
101.INS	XBRL Instance Document
101.SCH	XBRL Schema Document
101.CAL	XBRL Calculation Linkbase Document
101.LAB	XBRL Label Linkbase Document
101.PRE	XBRL Presentation Linkbase Document
101.DEF	XBRL Definition Linkbase Document

EXHIBIT 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002
AND RULES 13A-14 AND 15D-14 UNDER THE SECURITIES EXCHANGE ACT OF 1934

I, Jason Lane, certify that:

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

Date: August 14, 2019

/s/ Jason Lane

Jason Lane

Chief Executive Officer

CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002
AND RULES 13A-14 AND 15D-14 UNDER THE SECURITIES EXCHANGE ACT OF 1934

I, Michael McMullen, certify that:

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

Date: August 14, 2019

/s/ Michael McMullen
Michael McMullen
Chief Financial Officer

EXHIBIT 32

CERTIFICATION OF PERIODIC FINANCIAL REPORT BY THE CHIEF EXECUTIVE
OFFICER AND CHIEF FINANCIAL OFFICER
PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Solely for the purposes of complying with 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, we, the undersigned Acting Chief Executive Officer and the Chief Financial Officer of QS Energy, Inc. (the "Company"), hereby certify, based on our knowledge, that the Quarterly Report on Form 10-Q of the Company for the quarter ended June 30, 2019 (the "Report") fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 14, 2019

/s/ Jason Lane

Jason Lane
Chief Executive Officer

Date: August 14, 2019

/s/ Michael McMullen

Michael McMullen
Chief Financial Officer