

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 **September 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 November 13, 2019 was 302,794,965.

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

	September 30, 2019 (unaudited)	December 31, 2018
ASSETS		
Current assets:		
Cash	\$ 505,000	\$ 1,153,000
Prepaid expenses and other current assets	245,000	34,000
Total current assets	<u>750,000</u>	<u>1,187,000</u>
Property and equipment, net of accumulated depreciation of \$78,000 and \$73,000 at September 30, 2019 and December 31, 2018, respectively	25,000	24,000
Other assets	2,000	2,000
Total assets	<u>\$ 777,000</u>	<u>\$ 1,213,000</u>
LIABILITIES AND STOCKHOLDERS' DEFICIT		
Current liabilities:		
Accounts payable-license agreements	\$ 1,196,000	\$ 1,073,000
Accounts payable and accrued expenses	500,000	658,000
Accrued expenses and accounts payable-related parties	5,000	55,000
Convertible debentures, net of discounts of \$238,000 and \$1,100,000 at September 30, 2019 and December 31, 2018, respectively	947,000	909,000
Total current liabilities	<u>2,648,000</u>	<u>2,695,000</u>
Commitments and contingencies		
Stockholders' deficit		
Common stock, \$.001 par value: 500,000,000 shares authorized, 302,684,965 and 256,123,515 shares issued and outstanding at September 30, 2019 and December 31, 2018, respectively	302,685	256,123
Additional paid-in capital	115,722,315	111,429,877
Accumulated deficit	<u>(117,896,000)</u>	<u>(113,168,000)</u>
Total stockholders' deficit	<u>(1,871,000)</u>	<u>(1,482,000)</u>
Total liabilities and stockholders' deficit	<u>\$ 777,000</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 September 30,		Nine months ended September 30,	
	2019	2018	2019	2018
Revenues	\$ —	\$ —	\$ —	\$ —
Costs and Expenses				
Operating expenses	493,000	431,000	1,626,000	1,387,000
Research and development expenses	82,000	50,000	665,000	145,000
Loss before other expense	(575,000)	(481,000)	(2,291,000)	(1,532,000)
Other expense				
Interest and financing expense	(413,000)	(200,000)	(2,437,000)	(607,000)
Net Loss	<u>\$ (988,000)</u>	<u>\$ (681,000)</u>	<u>\$ (4,728,000)</u>	<u>\$ (2,139,000)</u>
Net loss per common share, basic and diluted	<u>\$ (0.00)</u>	<u>\$ (0.00)</u>	<u>\$ (0.02)</u>	<u>\$ (0.01)</u>
Weighted average common shares outstanding, basic and diluted	<u>298,834,404</u>	<u>251,732,417</u>	<u>286,120,559</u>	<u>243,167,707</u>

See notes to condensed consolidated financial statements.

QS ENERGY, INC.
CONDENSED CONSOLIDATED STATEMENT OF STOCKHOLDERS' DEFICIT, UNAUDITED
FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2019 AND SEPTEMBER 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	4,039,690	4,040	287,960		292,000
Common stock issued on conversion of notes payable	42,271,760	42,272	2,311,728		2,354,000
Fair value of warrants and beneficial conversion feature of issued convertible notes			1,350,000		1,350,000
Fair value of options and warrants issued as compensation			275,000		275,000
Common stock issued for services	250,000	250	67,750		68,000
Net loss				(4,728,000)	(4,728,000)
Balance, September 30, 2019	<u>302,684,965</u>	<u>\$ 302,685</u>	<u>\$ 115,722,315</u>	<u>\$ (117,896,000)</u>	<u>\$ (1,871,000)</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	7,374,125	7,374	466,626		474,000
Fair value of warrants and beneficial conversion feature of issued convertible notes			526,000		526,000
Fair value of options and warrants issued as compensation			340,000		340,000
Common stock issued for services	50,000	50	11,950		12,000
Net loss				(2,139,000)	(2,139,000)
Balance, September 30, 2018	<u>254,198,515</u>	<u>\$ 254,198</u>	<u>\$ 109,979,802</u>	<u>\$ (112,248,000)</u>	<u>\$ (2,014,000)</u>

See notes to condensed consolidated financial statements.

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

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount			
Balance, June 30, 2019	298,457,191	\$ 298,456	\$ 115,085,544	\$ (116,908,000)	\$ (1,524,000)
Common stock issued on exercise of warrants and options	362,500	363	18,637		19,000
Common stock issued on conversion of notes payable	3,865,274	3,866	305,134		309,000
Fair value of warrants and beneficial conversion feature of issued convertible notes			232,000		232,000
Fair value of options and warrants issued as compensation			81,000		81,000
Common stock issued for services	-	-	-		-
Net loss				(988,000)	(988,000)
Balance, September 30, 2019	<u>302,684,965</u>	<u>\$ 302,685</u>	<u>\$ 115,722,315</u>	<u>\$ (117,896,000)</u>	<u>\$ (1,871,000)</u>

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount			
Balance, June 30, 2018	251,448,515	\$ 251,448	\$ 109,543,552	\$ (111,567,000)	\$ (1,772,000)
Common stock issued on exercise of warrants and options	-	-	-		-
Common stock issued on conversion of notes payable	2,750,000	2,750	134,250		137,000
Fair value of warrants and beneficial conversion feature of issued convertible notes			207,000		207,000
Fair value of options and warrants issued as compensation			95,000		95,000
Net loss				(681,000)	(681,000)
Balance, September 30, 2018	<u>254,198,515</u>	<u>\$ 254,198</u>	<u>\$ 109,979,802</u>	<u>\$ (112,248,000)</u>	<u>\$ (2,014,000)</u>

See notes to condensed consolidated financial statements.

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

	Nine months ended September 30	
	2019	2018
Cash flows from Operating Activities		
Net loss	\$ (4,728,000)	\$ (2,139,000)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock based compensation expense	275,000	340,000
Issuance of common stock for services	68,000	12,000
Amortization of debt discount and interest expense	2,392,000	567,000
Depreciation and amortization	5,000	21,000
Changes in operating assets and liabilities:		
Prepaid expenses and other assets	(211,000)	-
Accounts payable and accrued expenses	(158,000)	(88,000)
Accounts payable – license agreements	123,000	171,000
Accounts payable and accrued expenses – related parties	(50,000)	18,000
Deposits and other current liabilities	-	-
Net cash used in operating activities	(2,284,000)	(1,098,000)
Cash flows from investing activities		
Purchase of equipment	(6,000)	-
Net cash used in investing activities	(6,000)	-
Cash flows from financing activities		
Net proceeds from issuance of convertible notes and warrants	1,350,000	526,000
Net proceeds from exercise of warrants	292,000	647,000
Net cash provided by financing activities	1,642,000	1,173,000
Net increase (decrease) in cash	(648,000)	75,000
Cash, beginning of period	1,153,000	204,000
Cash, end of period	\$ 505,000	\$ 279,000
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	\$ 2,354,000	\$ 474,000
Fair value of warrants and beneficial conversion feature associated with issued convertible notes	\$ 1,350,000	\$ 526,000

See notes to condensed consolidated financial statements.

QS ENERGY, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS, UNAUDITED
NINE MONTHS ENDED SEPTEMBER 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 nine-months ended September 30, 2019, the Company incurred a net loss of \$4,728,000, used cash in operations of \$2,284,000 and had a stockholders' deficit of \$1,871,000 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 September 30, 2019, the Company had cash on hand in the amount of \$505,000. Management estimates that the current funds on hand will be sufficient to continue operations through January 2020, 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 September 30, 2019 and 2018, 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.

	September 30, 2019	September 30, 2018
Options	39,450,603	35,351,300
Warrants	25,941,062	7,288,855
Common stock issuable upon conversion of notes payable	12,689,373	7,204,552
Total	<u>78,081,038</u>	<u>49,844,707</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 September 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 September 30, 2019.

In August 2019, the Company paid \$67,000 as a deposit on equipment to be installed at the demonstration site. The Company plans to amortize the full amount of this deposit as a research and development cost upon receipt and acceptance of the equipment currently scheduled for delivery during the fourth quarter of 2019.

For the nine-month periods ended September 30, 2019 and 2018 research and development costs were \$665,000 and \$145,000, respectively. For the three-month periods ended September 30, 2019 and 2018 research and development costs were \$82,000 and \$50,000, respectively.

Patent Costs

Patent costs consist of patent-related legal and filing fees. Due to the uncertainty associated with the development of our AOT, all patent costs are expensed as incurred. During the nine-month periods ended September 30, 2019 and 2018, patent costs were \$2,000 and \$15,000, 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 September 30, 2019 and December 31, 2018, the Company owed \$237,000 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 are included as part of Accrued expenses and accounts payable on the accompanying balance sheet. The amount to be paid 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 September 30, 2019, and December 31, 2018, accrued expenses and accounts payable to related parties amounted to \$5,000 and \$55,000, respectively.

4. Property and Equipment

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

	September 30, 2019	December 31, 2018
Office equipment	\$ 36,000	\$ 30,000
Furniture and fixtures	5,000	5,000
Testing Equipment	37,000	37,000
Leasehold Improvements	25,000	25,000
Subtotal	103,000	97,000
Less accumulated depreciation	(78,000)	(73,000)
Total	<u>\$ 25,000</u>	<u>\$ 24,000</u>

Depreciation expense for the nine-month periods ended September 30, 2019 and 2018 was \$5,000 and \$21,000, respectively. Depreciation expense for the three-month periods ended September 30, 2019 and 2018 was \$2,000 and \$4,000, respectively.

5. Convertible Notes

	September 30, 2019 (unaudited)	December 31, 2018
Balance due on convertible notes	\$ 1,025,000	\$ 1,886,000
Accrued interest	160,000	123,000
Subtotal	1,185,000	2,009,000
Convertible note discount	(238,000)	(1,100,000)
Balance on convertible notes, net of note discounts	<u>\$ 947,000</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 fully vested warrants to purchase shares of common stock of the Company 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 in varying amounts through December 2019, accrued interest of \$123,000 and unamortized note discount of \$1,100,000.

During the nine-month period ended September 30, 2019, the Company issued similar convertible promissory notes in the aggregate of \$1,485,000 for cash of \$1,350,000 or a discount of \$135,000. 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 10.8 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 \$1,350,000 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 nine-month period ended September 30, 2019 notes payable of \$2,354,000 were converted into 42,271,760 shares of common stock.

As of September 30, 2019, total outstanding notes payable amounted to \$1,025,000, accrued interest of \$160,000 and unamortized note discount of \$238,000 for a net balance of \$947,000. A total of nine notes in the aggregate of \$484,000 have reached maturity and are past due. The remaining notes are due in varying amounts through September 2020.

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 nine-month periods ended September 30, 2019 and 2018, our research and development expenses were \$665,000 and \$145,000 respectively. For the three-month periods ended September 30, 2019 and 2018, our research and development expenses were \$82,000 and \$50,000 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 nine-month periods ended September 30, 2019 and 2018, the Company incurred total expenses of \$525,000 and \$5,000, respectively, in the manufacture, delivery and testing of the AOT prototype equipment. During the three-month periods ended September 30, 2019 and 2018, the Company incurred total expenses of \$36,000 and \$4,000, 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 September 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 September 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 nine-month periods ended September 30, 2019 and 2018 pursuant to these two License Agreements amounted to \$140,000 and \$141,000, respectively. Total expenses recognized during each three-month periods ended September 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 nine-month periods ended September 30, 2019 and 2018, the Company also recognized penalty interest on past-due balances of \$45,000 and \$40,000, respectively, which is included as part of interest and financing expense in the accompanying statements of operations.

As of September 30, 2019 and December 31, 2018, total unpaid fees due to Temple pursuant to these agreements are \$1,196,000 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 \$1,061,000 are deemed past due. The Company has negotiated and anticipates it will continue to negotiate with Temple to settle or cure the past due balance.

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

7. Common Stock

During the nine months ended September 30, 2019, the Company issued 46,561,450 shares of its common stock as follows:

- The Company issued 42,271,760 shares of its common stock upon the conversion of \$ 2,354,000 in convertible notes pursuant to the convertible notes conversion prices of \$0.05 to \$0.48 per share.
- The Company issued 3,501,493 shares of its common stock upon the exercise of warrants for proceeds of \$221,000 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 September 30, 2019 was 5.0 years. Stock option activity for the period January 1, 2019 up to September 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	—	—
September 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 September 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	7.8	\$ 0.10	16,808,783	\$ 0.10	
\$0.25 - \$0.49	20,913,552	2.5	0.27	20,913,552	0.27	
\$0.50 - \$0.99	471,052	4.6	0.85	471,052	0.85	
\$1.00 - \$2.00	150,446	3.8	1.18	150,446	1.18	
	<u>39,450,603</u>	5.0	\$ 0.20	<u>38,343,833</u>	\$ 0.21	

During the nine-month period ending September 30, 2019, and pursuant to the Company's Board Compensation policy approved by the Board September 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 nine-month periods ended September 30, 2019 and 2018, the Company recognized compensation costs based on the fair value of options that vested of \$265,000 and \$340,000 respectively. During the three-month periods ended September 30, 2019 and 2018, the Company recognized compensation costs based on the fair value of options that vested of \$82,000 and \$95,000 respectively.

At September 30, 2019, the Company's closing stock price was \$0.10 per share. The aggregate intrinsic value of the options outstanding at September 30, 2019 was \$453,000. Future unamortized compensation expense on the unvested outstanding options at September 30, 2019 is approximately \$82,000 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 September 30, 2019.

	Warrants	Weighted Avg. Exercise Price
January 1, 2019	21,055,355	\$ 0.09
Granted	10,922,062	0.07
Exercised	(3,501,493)	0.06
Cancelled	(2,534,862)	0.13
September 30, 2019	<u>25,941,062</u>	<u>\$ 0.08</u>

The weighted average exercise prices, remaining contractual lives for warrants granted, exercisable, and expected to vest as of September 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	23,871,062	0.4	\$ 0.06	23,871,062	\$ 0.06
\$0.25 - \$0.49	2,000,000	2.1	0.30	2,000,000	0.30
\$0.50 - \$1.00	70,000	4.6	0.80	70,000	0.80
	<u>25,941,062</u>	0.5	\$ 0.08	<u>25,941,062</u>	\$ 0.08

In the nine-month period ending September 30, 2019, pursuant to terms of convertible notes issued, the Company granted warrants to purchase 10,823,062 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 nine-month period ending September 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 nine-month period ended September 30, 2019, warrants to acquire 3,501,493 shares of common stock were exercised resulting in net proceeds to the Company of \$221,000.

At September 30, 2019, the aggregate intrinsic value of the warrants outstanding was \$1,060,000.

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

Unregistered Sales of Equity Securities

From September 23, 2019, through October 4, 2019, the Company issued and sold to accredited US investors an aggregate of \$264,550 Convertible Promissory Notes (the “Notes”) and warrants to purchase an aggregate of 1,889,644 shares of common stock (the “Warrants”). The Company received proceeds from the closing of the private placement of \$240,500, which funds were used, and are being used, for general corporate purposes and working capital.

The Notes are due twelve (12) months from their respective issuance dates (the “Maturity Date”). The Notes do not bear interest and were issued in the face amount equal to 110% of the purchasers’ commitments. The Notes are convertible into shares of the Company’s common stock at a rate of \$0.07 per share. If the Notes are not paid in full by the Maturity Date, the balance remaining on the Maturity Date shall be increased by 10% and the Company shall be required to pay interest at a rate of 10% per annum thereon until all sums thereunder are paid in full.

The Warrants are exercisable into shares of the Company’s common stock for a term of one (1) year at an exercise price of \$0.07 per share. The Warrants also contain provisions that protect the holders against dilution by adjustment of the conversion price in certain events involving a reduction or increase in the Company’s shares.

The offering was made U.S. “accredited investors,” as the term is defined in Regulation D under the Securities Act of 1933, as amended (the “Securities Act”), and were made without general advertising or solicitation. The securities sold in the offering were not registered under the Securities Act, or the securities laws of any state, and were offered and sold in reliance on exemptions from registration including the exemption from registration afforded by Section 4(a)(2) of the Securities Act and Regulation S promulgated under the Securities Act, and corresponding provisions of state securities law, which, respectively, exempt transactions by an issuer not involving any public offering or transactions with non-U.S. Investors.

Conversion of Convertible Notes

From October 1, 2019 up to November 13, 2019, Company issued 3,535,714 shares of common stock upon conversion of previously issued convertible notes in aggregate value of \$247,500.

Exercise of Warrants

From October 1, 2019 up to November 13, 2019, Company issued 110,000 shares of common stock upon the exercise of previously issued warrants for aggregate cash proceeds of \$5,500.

Amendment to Employment Agreements

Effective November 15, 2019, the Company amended the employment agreement of its President and Chief Executive Officer. Under this amendment the term of the agreement was extended for three months, expiring February 15, 2020, cash compensation was reduced to \$0 per month, and the Company agreed to grant an option on the Effective Date to the employee to purchase 300,000 shares of Company restricted stock at an exercise price equal to the market closing price on the date of grant, vesting monthly at 100,000 shares per month, and expiring 10 years from the date of grant. The Company will value this option based upon market conditions on the date of grant at a value derived from the Black-Scholes Option Pricing model, which will be amortized over the three-month vesting period as a non-cash compensation expense.

Effective November 15, 2020, the Company amended the employment agreement of its Chief Financial Officer. Under this amendment the term of the agreement is three months, expiring February 15, 2019. No other terms were modified under this amendment.

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, technology and our products, 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 September 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 expressed interest in AOT operations at one of their heavy crude pipeline locations subject to results of other AOT demonstration projects and 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 there are no current plans to resume the lease or reinstall an AOT device at a Kinder Morgan facility.

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 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 may 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 may 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. 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. 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 had planned 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. Subsequent laboratory and in-field testing performed at our Tomball facility showed the electrical conductivity of the oil to be quite high and in line with field observations. Although these tests indicated the unit was generally functioning properly, results further indicated the damaged power supply, once repaired, would not be capable of providing sufficient power to fully treat the crude oil due to the oil's high electrical conductivity. In anticipation of this result, the Company initiated in advance of testing parallel tasks of: i) installation of the repaired power supply and perform limited testing to confirm laboratory and in-field test results; and ii) procurement of a new power supply capable of providing significantly more power and reconfiguration of a newly optimized AOT grid pack assembly based on the latest laboratory and in-field test results.

When the repaired power supply was installed in late August 2019, the system operated as expected, and limited testing was performed at that time. Results of this limited testing were consistent with laboratory tests performed to date. As expected, the repaired power supply was not capable of providing sufficient power to fully treat the crude oil under commercial operating conditions. Based on results of this limited testing, Company engineers completed designs and began implementation of modifications to the AOT internal grid pack assembly. Based on current vendor delivery schedules, delivery and installation of new power supply and modifications to the AOT internal grid pack assembly should be completed in the fourth quarter of 2019. If this timeline is met, we anticipate resumption of in-field testing at the demonstration site before the end of this year.

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.

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. Nine months ended September 30, 2019 and 2018

Results of Operations for nine months ended September 30, 2019 and 2018

	2019	Nine months ended September 30, 2018	Change
Revenues	\$ —	\$ —	\$ —
Costs and Expenses			
Operating expenses	1,626,000	1,387,000	239,000
Research and development expenses	665,000	145,000	520,000
Loss before other income (expense)	(2,291,000)	(1,532,000)	(759,000)
Other income (expense)			
Interest and financing expense	(2,437,000)	(607,000)	(1,830,000)
Net Loss	<u>\$ (4,728,000)</u>	<u>\$ (2,139,000)</u>	<u>\$ (2,589,000)</u>

Operating expenses were \$1,626,000 for the nine-month period ended September 30, 2019, compared to \$1,387,000 for the nine-month period ended September 30, 2018, an increase of \$239,000. This is due to a decrease in non-cash expenses of \$25,000 and an increase in cash expenses of \$264,000. Specifically, the decrease in non-cash expenses is attributable to decreases in depreciation of \$16,000, and stock compensation expense attributable to options granted to employees and directors of \$74,000, offset by an increase in common stock and warrants issued as compensation for services of \$65,000. The increase in cash expense is attributable increases in consulting fees of \$63,000, freight costs of \$4,000, insurance expense of \$47,000, office expenses of \$34,000, public and investor relations of \$79,000, rent and utilities of \$21,000, travel expenses of \$45,000, and property tax of \$9,000, offset by a decreases in salaries and benefits of \$22,000, legal and accounting fees of \$15,000, and other expenses of \$1,000.

Research and development expenses were \$665,000 for the nine-month period ended September 30, 2019, compared to \$145,000 for the nine-month period ended September 30, 2018, an increase of \$520,000. This increase is attributable an increase in prototype product development costs of \$520,000.

Other income and expense were \$2,437,000 expense for the nine-month period ended September 30, 2019, compared to \$607,000 expense for the three-month period ended September 30, 2018, a net increase in other expenses of \$1,830,000. This increase is attributable to an increase in non-cash other expenses of \$1,830,000. 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 \$1,825,000, offset by a decrease in other non-cash interest of \$5,000.

The Company had a net loss of \$4,728,000, or \$0.02 per share, for the nine-month period ended September 30, 2019, compared to a net loss of \$2,139,000, or \$0.01 per share, for the nine-month period ended September 30, 2018.

II. Three months ended September 30, 2019 and 2018

	Three months ended September 30		
	2019	2018	Change
Revenues	\$ —	\$ —	\$ —
Costs and expenses			
Operating expenses	493,000	431,000	62,000
Research and development expenses	82,000	50,000	32,000
Loss before other income (expense)	(575,000)	(481,000)	(94,000)
Other income (expense)			
Interest and financing expense	(413,000)	(200,000)	(213,000)
Net Loss	<u>\$ (988,000)</u>	<u>\$ (681,000)</u>	<u>\$ (307,000)</u>

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

Operating expenses were \$493,000 for the three-month period ended September 30, 2019, compared to \$431,000 for the three-month period ended September 30, 2018, an increase of \$62,000. This is due to a decrease in non-cash expenses of \$16,000, and an increase in cash expenses of \$78,000. Specifically, the increase in non-cash expenses is attributable to decreases in depreciation of \$2,000, stock compensation expenses attributable to the fair value of options granted to directors and employees of \$13,000, and expenses attributable to the fair value of common stock and warrants issued as compensation for services of \$1,000. The increase in cash expense is attributable increases in consulting fees of \$45,000, insurance expense of \$26,000, office expenses of \$2,000, investor and public relations of \$14,000, rent and utilities of \$11,000, and travel expenses of \$9,000, offset by a decrease in salaries and benefits of \$6,000, legal and accounting fees of \$21,000, and other operating expenses of \$2,000.

Research and development expenses were \$82,000 for the three-month period ended September 30, 2019, compared to \$50,000 for the three-month period ended September 30, 2018, an increase of \$32,000. This decrease is attributable to decreases in prototype product development costs of \$32,000.

Other income and expense were \$413,000 expense for the three-month period ended September 30, 2019, compared to \$200,000 expense for the three-month period ended September 30, 2018, a net increase in other expenses of \$213,000. This increase is attributable to an increase in non-cash other expenses of \$213,000. 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 \$213,000.

The Company had a net loss of \$988,000, or \$0.00 per share, for the three-month period ended September 30, 2019, compared to a net loss of \$681,000, or \$0.00 per share, for the three-month period ended September 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 \$1,871,000 as of September 30, 2019. Our negative operating cash flow for the periods ended September 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 \$4,728,000 and a negative cash flow from operations of \$2,284,000 for the nine-month period ended September 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 September 30, 2019, we received cash totaling \$1,350,000 from issuance of our convertible notes payable and exercise of options and warrants to purchase common stock and used cash in operations of \$2,284,000. At September 30, 2019, we had cash on hand in the amount of \$505,000. 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 nine-months ended September 30, 2019, the Company incurred a net loss of \$4,728,000, used cash in operations of \$2,284,000 and had a stockholders' deficit of \$1,871,000 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 September 30, 2019, the Company had cash on hand in the amount of \$505,000. Management estimates that the current funds on hand will be sufficient to continue operations through January 2020, 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 September 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 September 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 nine-month period ended September 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 nine months ended September 30, 2019, the Company issued 42,271,760 shares of its common stock upon the conversion of \$2,354,000 in convertible notes at \$0.05 to \$0.48 per share, and issued 3,501,493 shares of its common stock upon the exercise of warrants for proceeds of \$221,000 at exercise prices of \$0.05 to \$0.18 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

10.1	Form of Summer 2019 Securities Purchase Agreement
10.2	Third Amendment to Lane Employment Agreement
10.3	Second Amendment to McMullen Employment Agreement
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: November 14, 2019

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

EXHIBITS

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--------------------	--------------------

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SECURITIES PURCHASE AGREEMENT
Convertible Promissory Notes and Stock Purchase Warrants

THIS SECURITIES PURCHASE AGREEMENT (this "Agreement") is made and entered into as of _____, 2019 by and between QS Energy, Inc., a Nevada corporation (the "Issuer") and those individuals and entities who sign and deliver an executed copy of this Agreement to the Issuer (each, a "Purchaser" and collectively, the "Purchasers"), with reference to the following:

RECITALS

A. Purchasers desire to purchase from Issuer and Issuer desires to sell to Purchaser certain of Issuer's Convertible Notes, in the aggregate face amount up to a maximum of Four Hundred Thousand Dollars (\$750,000) in the form of Exhibit A attached hereto (individually, a "Note" and collectively, the "Notes"), and certain of Issuer's Stock Purchase Warrants to purchase up to a certain number of shares of the common stock (the "Common Stock") of the Issuer equal to 50% of the number of shares initially issuable on conversion of the Notes, in the form of Exhibit B attached hereto (individually, the "Warrants" and collectively with the Notes, the "Securities"). The face amount of the Note each Purchaser has committed to purchase, and the amount of the purchase price thereof to be paid to the Issuer by the Purchaser (a "Commitment") is listed on the signature page such Purchaser executes and delivers to the Issuer. Minimum Commitment shall be no less than \$10,000.

B. Issuer's sale of the Securities to the Purchasers may be made in reliance upon the provisions of Section 4(a)(2) under the Securities Act of 1933, as amended (the "Securities Act") or Rule 506 of Regulation D promulgated by the Securities and Exchange Commission (the "SEC") thereunder, or other applicable rules and regulations of the SEC or upon such other exemption from the registration requirements of the Securities Act as may be available with respect to the transactions contemplated hereby.

C. At any time when any amount of principal or interest of the Notes shall be outstanding, such unpaid amounts shall be convertible, at the election of the Purchaser, into shares of the Issuer's Common Stock at a price of \$0.07 per share (the "Conversion Price").

D. The Warrants shall be issued at the same time each Note is issued to the Purchaser hereunder and shall be exercisable at \$0.07 per share (the "Exercise Price"), for such number of shares equal to 50% of the result obtained by dividing (i) the face amount of the Notes issued simultaneously with the Warrant by (ii) the Conversion Price. The Warrants shall expire one (1) year from the date of issuance thereof.

AGREEMENT

NOW THEREFORE, in consideration of the foregoing recitals, which shall be considered an integral part of this Agreement, the covenants and agreements set forth hereafter, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Purchasers and the Issuer hereby agree as follows

1. Purchase of the Notes and Warrants. On the terms and subject to the conditions set forth in this Agreement and in the Notes and Warrants, the Purchasers shall purchase from the Issuer and the Issuer shall sell to the Purchaser the Securities.

2. Purchaser's Representations, Warranties and Covenants. In order to induce the Issuer to sell and issue the Securities to the Purchaser under one or more exemptions from registration under the Securities Act, the Purchasers, severally and not jointly, represent and warrant to the Issuer, and covenant with the Issuer, that:

(a) (i) Such Purchaser has the requisite power and authority to enter into and perform this Agreement, and each of the other agreements entered into by the parties hereto in connection with the transactions contemplated by this Agreement (collectively, the "Transaction Documents"), and to purchase the Securities in accordance with the terms hereof and thereof.

(ii) The execution and delivery of the Transaction Documents by the Purchaser and the consummation by it of the transactions contemplated thereby have been duly and validly authorized by the Purchaser's organizational documents and no further consent or authorization is required by the Purchaser.

(iii) The Transaction Documents have been duly and validly executed and delivered by the Purchaser.

(iv) The Transaction Documents, and each of them, constitutes the valid and binding obligation of the Purchaser enforceable against the Purchaser in accordance with their respective terms, except as such enforceability may be limited by general principles of equity or applicable bankruptcy, insolvency, reorganization, moratorium, liquidation or similar laws relating to, or affecting generally, the enforcement of creditors' rights and remedies.

(a) The execution, delivery and performance of the Transaction Documents by the Purchaser and the consummation by the Purchaser of the transactions contemplated thereby will not conflict with or constitute a default under any agreement or instrument to which the Purchaser is a party or by which the Purchaser is bound.

(b) The Purchaser is acquiring the Securities for investment for its own account, and not with a view toward distribution thereof, and with no present intention of dividing its interest with others or reselling or otherwise transferring or disposing of all or any portion of either the Notes or Warrants. The undersigned has not offered or sold a participation in this purchase of either the Notes or Warrants, and will not offer or sell any interest therein. The Purchaser further acknowledges that the Purchaser does not have in mind any sale of either the Notes or Warrants currently or after the passage of a fixed or determinable period of time or upon the occurrence or non-occurrence of any predetermined events or consequence; and that it has no present or contemplated agreement, undertaking, arrangement, obligation, indebtedness or commitment providing for or which is likely to compel a disposition of either the Notes or Warrants and is not aware of any circumstances presently in existence that are likely in the future to prompt a disposition thereof.

(c) The Purchaser acknowledges that the Securities have been offered to it in direct communication between itself and the Issuer and not through any advertisement, article, notice or other communication regarding the Securities published in any newspaper, magazine or similar media or on the Internet or broadcast over television or radio or presented in any seminar or any other general solicitation or general advertisement.

(f) The Purchaser acknowledges that the Issuer has given it access to all information relating to the Issuer's business that it has requested. The Purchaser has reviewed all materials relating to the Issuer's business, finance and operations which it has requested and the Purchaser has reviewed all of such materials as the Purchaser, in the Purchaser's sole and absolute discretion shall have deemed necessary or desirable. The Purchaser has had an opportunity ask questions of and to discuss the business, management and financial affairs of the Issuer with the Issuer's management. Specifically but not by way of limitation, the Purchaser acknowledges the Issuer's publicly available filings made periodically with the SEC, which filings are available at www.sec.gov and which filings the Purchaser acknowledges reviewing or having had the opportunity of reviewing.

(g) The Purchaser acknowledges that it has, by reason of its business and financial experience, knowledge, sophistication and experience in financial and business matters and in making investment decisions of this type that it is capable of (i) evaluating the merits and risks of an investment in the Securities and making an informed investment decision in connection therewith; (ii) protecting its own interest; and (iii) bearing the economic risk of such investment for an indefinite period of time for Securities which are not transferable or freely tradable. The undersigned hereby agrees to indemnify the Issuer thereof and to hold each of such persons and entities, and the officers, directors and employees thereof harmless against all liability, costs or expenses (including reasonable attorneys' fees) arising by reason of or in connection with any misrepresentation or any breach of warranties of the undersigned contained in this Agreement, or arising as a result of the sale or distribution of the Securities or the Common Stock issuable upon conversion of the Notes or exercise of the Warrants, by the undersigned in violation of the Securities Act, the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or any other applicable law, either federal or state. This subscription and the representations and warranties contained herein shall be binding upon the heirs, legal representatives, successors and assigns of the Purchaser.

(h) The Purchaser is familiar with the definition of an "accredited investor" as that term is defined in Rule 501(a) of Regulation D of the Securities Act and represents and warrants to the Issuer that it is either (i) an accredited investor at such time it was offered the Securities and will be on each date which it converts any of the Notes or exercises any of the Warrants as so defined or (ii) a "qualified institutional buyer" as defined in Rule 144A under the Securities Act. Such Purchaser is not required to be registered as a broker-dealer under Section 15 of the Exchange act. If the Purchaser is not a resident of the United States, the Purchaser is not a "U.S. person[s]" as that term is defined in Rule 902 of Regulation S promulgated under the Securities Act of 1933, as amended.

(i) During the term of this Agreement and the other Transaction Documents, the Purchaser will comply with the provisions of Section 9 of the Exchange Act, and the rules and regulations promulgated thereunder, with respect to transactions involving the Common Stock. Commencing on the date on which the Purchaser received a term sheet from the Company or any representative or agent of the Company (written or oral) setting forth the material terms of the transactions contemplated hereunder until the date hereof and during the term of this Agreement and the other Transaction Documents, the Purchaser agrees not to sell the Issuer's Common Stock short or engage in any hedging transactions in the Issuer's Common Stock, either directly or indirectly, through its affiliates, principals, agents or advisors.

(j) The Purchaser is aware that the Notes and the Warrants, and the shares of Common Stock issuable upon conversion of the Notes or exercise of the Warrants are restricted securities as defined under federal securities laws and are not freely tradeable and may only be disposed of in compliance with state and federal securities laws. In connection with any transfer of the Notes and the Warrants, and the shares of Common Stock issuable upon conversion of the Notes or exercise of the Warrants, other than pursuant to an effective registration statement or Rule 144, the Issuer may require the transferor thereof to provide to the Issuer an opinion of counsel, the form and substance of which opinion shall be reasonably satisfactory to the Issuer, to the effect that such transfer does not require registration of such transferred Securities under the Securities Act. Further, the Purchaser understands and acknowledges that any certificates evidencing the Notes, the Warrants or the shares of Common Stock issuable upon conversion of the Notes or exercise of the Warrants will be restricted securities and not freely tradeable and will bear the legend in substantially the following form:

THE SECURITIES EVIDENCED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR QUALIFIED FOR SALE UNDER ANY STATE SECURITIES LAWS (COLLECTIVELY, "SECURITIES LAWS") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED UNLESS REGISTERED OR QUALIFIED FOR SALE UNDER ALL APPLICABLE SECURITIES LAWS OR UNLESS, IN THE OPINION OF COUNSEL SATISFACTORY TO THE ISSUER, IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER, ANY SUCH OFFER, SALE OR OTHER TRANSFER IS EXEMPT FROM THE REGISTRATION OR QUALIFICATION REQUIREMENTS OF SUCH SECURITIES LAWS.

(k) The Purchaser understands and acknowledges that following the purchase of the Notes, the Warrants and any shares of Common Stock issuable upon conversion of the Notes or exercise of the Warrants, each may only be disposed of pursuant to either (i) an effective registration statement under the Securities Act or (ii) an exemption from the registration requirements of the Securities Act.

(l) The Purchaser understands and acknowledges that the Issuer has neither filed a registration statement with the SEC or any state authorities nor agreed to do so, nor contemplates doing so in the future for the transactions contemplated by this Agreement or the other Transaction Documents, and in the absence of such a registration statement or exemption, the undersigned may have to hold the Notes, the Warrants and any shares of Common Stock issuable upon conversion of the Notes or exercise of the Warrants, indefinitely and may be unable to liquidate any of them in case of an emergency.

(m) The Purchaser is purchasing the Notes and Warrants, and will acquire any shares of Common Stock issuable upon conversion of the Notes or exercise of the Warrants, for its own account for investment purposes and not with a view towards distribution and agrees to resell or otherwise dispose of any of the Notes or the Warrants, or any shares of Common Stock issuable upon conversion of the Notes or exercise of the Warrants, in accordance with the registration provisions of the Securities Act (or pursuant to an exemption from such registration provisions).

(n) The Purchaser is not and will not be required to be registered as a "dealer" under the Exchange Act, either as a result of its execution and performance of its obligations under this Agreement or otherwise.

(o) The Purchaser understands and acknowledges that proceeds raised in connection with this Agreement will be used by Issuer for general working capital purposes, including without limitation, the payment of salaries and professional fees, overhead and general administrative expenses.

(p) The Purchaser understands that it is liable for its own tax liabilities and has obtained no tax advice from the Issuer in connection with the purchase of the Securities.

(q) The Purchaser will not pay or receive any finder's fee or commission in respect of the consummation of the transactions contemplated by this Agreement.

(r) Purchaser hereby agrees and acknowledges that it has been informed of the following: (i) there are factors relating to the subsequent transfer of any of the Securities or shares of Common Stock underlying the Notes and Warrants that could make the resale of such Securities or shares of Common Stock underlying the Notes and Warrants difficult; and (ii) there is no guarantee that the Purchaser will realize any gain from the purchase of the Securities. The purchase of the Securities involves a high degree of risk and is subject to many uncertainties. These risks and uncertainties may adversely affect the Company's business, operating results and financial condition. In such an event, the trading price for the Common Stock could decline substantially and Purchaser could lose all or part of its investment. Purchaser is urged to review the risks identified under the Risk Factors section of Issuer's Form 10-K for the year ended December 31, 2018, as filed with the SEC on April 1, 2019.

(s) Purchaser understands and acknowledges that the Notes have an implied annual interest rate of 10%, inasmuch as the Notes will be issued and paid in an amount equal to 110% of the Commitment, except that if a Note is not paid on the Maturity Date, which is twelve (12) months from the date of issue of the Note, then the balance of the unpaid amount of the Note shall be increased by 10% and the Issuer shall then commence paying interest thereon at the rate of 10% per annum until all sums due under the Note are paid.

3. Issuer's Representations, Warranties and Covenants. The Issuer represents and warrants to the Purchaser that:

(a) The Issuer is a corporation duly organized and validly existing in good standing under the laws of the State of Nevada, and has the requisite corporate power and authorization to own its properties and to carry on its business as now being conducted.

(b) (i) The Issuer has the requisite corporate power and authority to enter into and perform this Agreement, and each of the other agreements entered into by the parties hereto in connection with the transactions contemplated by the Transaction Documents, and to issue the Notes and Warrants in accordance with the terms hereof and thereof.

(ii) the execution and delivery of the Transaction Documents by the Issuer and the consummation by it of the transactions contemplated hereby and thereby, including without limitation the reservation for issuance and the issuance of the Notes and Warrants pursuant to this Agreement, have been duly and validly authorized by the Issuer's Board of Directors and no further consent or authorization is required by the Issuer, its Board of Directors, or its shareholders.

(iii) The Transaction Documents have been duly and validly executed and delivered by the Issuer.

(iv) The Transaction Documents, and each of them, constitutes the valid and binding obligation of the Issuer enforceable against the Issuer in accordance with their respective terms, except as such enforceability may be limited by general principles of equity or applicable bankruptcy, insolvency, reorganization, moratorium, liquidation or similar laws relating to, or affecting generally, the enforcement of creditors' rights and remedies.

(c) The execution, delivery and performance of the Transaction Documents by the Issuer and the consummation by the Issuer of the transactions contemplated thereby will not conflict with or constitute a default under any agreement or instrument to which the Issuer is a party or under any organizational documents of the Purchaser.

4. Closing and Deliverables.

(a) Subject to the provisions of Section 4(b) below, provided that the Issuer shall have received on or prior to October 4, 2019 copies of this Agreement executed by Purchaser, there shall be a closing or closings (each, a "Closing Date") at which:

(i) Purchaser shall deliver to the Issuer immediately available funds, by check or by wire transfer (bank wiring instructions to be provided by Issuer on request) in an amount equal to the amount of the Purchaser's Commitment as set forth beside the name of the Purchaser on the Purchaser's signature page hereto. Funds paid to Issuer under this Agreement will be deposited in Issuer's operating account and used as working capital.

(ii) The Issuer shall deliver to the Purchaser (x) a Note, in the face amount equal to 110% of the Purchaser's Commitment and (y) a Warrant to purchase the exercisable amount of the Issuer's Common Stock at the Exercise Price. The Note and Warrant will be dated as of the Closing Date, as such date may be extended by us.

(b) The Issuer may continue to accept Commitments from Purchasers and issue and sell Securities to Purchasers at Closings on the terms and subject to the conditions set forth in this Agreement until (i) the aggregate amount of the Commitments equals \$750,000 or (ii) on or before October 4, 2019, whichever shall first occur.

5. Miscellaneous.

(a) Each party shall pay the fees and expenses of its own advisers, counsel, accountants and other experts, if any, and all other expenses incurred by such party incident to the negotiation, preparation, execution, delivery and performance of the Transactions Documents.

(b) This Agreement may be executed in two or more identical counterparts, all of which shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party; provided that a facsimile signature or signature transmitted by e-mail shall be considered due execution and shall be binding upon the signatory thereto with the same force and effect as if the signature were an original signature.

(c) The headings of this Agreement are for convenience of reference and shall not form part of, or affect the interpretation of, this Agreement. Whenever required by the context of this Agreement, the singular shall include the plural and neutral shall include the masculine and feminine.

(d) If any provision of this Agreement shall be invalid or unenforceable in any jurisdiction, such invalidity or unenforceability shall not affect the validity or enforceability of the remainder of this Agreement in that jurisdiction or the validity or enforceability of any provision of this Agreement in any other jurisdiction.

(e) This Agreement and the Notes and Warrants represent the final agreement between the Purchasers and the Issuer with respect to the terms and conditions set forth herein, and, the terms of this Agreement and the Notes and Warrants may not be contradicted by evidence of prior, contemporaneous, or subsequent oral agreements of the parties. No provision of this Agreement and the Notes and Warrants may be amended other than by an instrument in writing signed by the Purchaser and the Issuer, and no provision hereof or thereof may be waived other than by an instrument in writing signed by the party against whom enforcement is sought.

(f) Any notices or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered (i) upon receipt, when delivered personally; (ii) upon receipt, when sent by facsimile (provided confirmation of transmission is mechanically or electronically generated and kept on file by the sending party); or (iii) one (1) day after deposit with a nationally recognized overnight delivery service, in each case properly addressed to the party to receive the same. The addresses and facsimile numbers for such communications shall be:

If to the Issuer:

QS Energy, Inc.
23902 FM 2978
Tomball, TX 77375
Telephone: (281) 738-1893
Fax: (281) 738-5366

If to a Purchaser:

To the address set forth on the Purchaser's signature page hereto.

Each party shall provide five (5) days prior written notice to the other party of any change in address or facsimile number.

(g) This Agreement may not be assigned by Purchaser.

(h) This Agreement is intended for the benefit of the parties hereto and is not for the benefit of, nor may any provision hereof be enforced by, any other person.

(i) The representations and warranties of the Purchaser and the Issuer contained herein shall survive each of the Closings and the termination of this Agreement and the other Transaction Documents.

(j) The Purchaser and the Issuer shall consult with each other in issuing any press releases or otherwise making public statements with respect to the transactions contemplated hereby, except that no consultation shall be required if such disclosure is required by law or the rules and regulations of the SEC.

(k) Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as the other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the other Transaction Documents and the consummation of the transactions contemplated hereby and thereby.

(l) The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent, and no rules of strict construction will be applied against any party, as the parties mutually agree that each has had a full and fair opportunity to review this Agreement and the other Transaction Documents and seek the advice of counsel on it and them.

(m) The Purchaser and the Issuer each shall have all rights and remedies set forth in this Agreement and all rights and remedies which such holders have been granted at any time under any other agreement or contract and all of the rights which the Purchaser has by law. Any person having any rights under any provision of this Agreement shall be entitled to enforce such rights specifically (without posting a bond or other security), to recover damages by reason of any default or breach of any provision of this Agreement, including the recovery of reasonable attorneys' fees and costs, and to exercise all other rights granted by law.

(n) This Agreement shall be governed by and construed in accordance with the laws of the State of California applicable to contracts made and to be performed wholly within such state.

[remainder of page intentionally left blank]

IN WITNESS WHEREOF the Purchasers and the Issuer have executed this Agreement as of the date first above written.

THE ISSUER

QS ENERGY, INC.

By: _____
Mike McMullen
Its: Chief Financial Officer

THE PURCHASER

Name (signature)

Amount of Commitment
(U.S. Dollars)

Print Name

Date

Address

Address

Phone Number

Fax Number

Social Security Number

E-mail Address

EXHIBIT A

CONVERTIBLE NOTE

THE SECURITIES EVIDENCED BY THIS NOTE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR QUALIFIED FOR SALE UNDER ANY STATE SECURITIES LAWS (COLLECTIVELY, "SECURITIES LAWS") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED UNLESS REGISTERED OR QUALIFIED FOR SALE UNDER ALL APPLICABLE SECURITIES LAWS OR UNLESS, IN THE OPINION OF COUNSEL SATISFACTORY TO THE ISSUER, IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER, ANY SUCH OFFER, SALE OR OTHER TRANSFER IS EXEMPT FROM THE REGISTRATION OR QUALIFICATION REQUIREMENTS OF SUCH SECURITIES LAWS.

\$ _____, 2019 ("Issuance Date")

FOR VALUE RECEIVED, **QS ENERGY, INC.**, a corporation organized under the laws of the State of Nevada (the "Company"), promises to pay to the order of _____ "Investor", as that term is defined on the Acknowledgement and Acceptance page of this Convertible Note ("Note") (hereafter, together with any subsequent holder hereof, called "Holder"), at "Investor's Address," as that term is set forth on such page or at such other place as Holder may direct, the amount noted above, payable in full Twelve (12) Months from the Issuance Date (the "Maturity Date").

If this Note is not paid in full on or prior to the Maturity Date the remaining balance shall be increased by 10% and the Company shall pay interest thereon at the rate of 10% per annum until all sums due hereunder are paid in full.

Payments of both principal and interest will be made in immediately available funds in lawful money of the United States of America to the Holder at the Investor's Address.

This Note is subject to the following additional provisions:

1. The Company shall be entitled to withhold from all payments of principal and/or interest of this Note any amounts required to be withheld under the applicable provisions of the U.S. Internal Revenue Code of 1986, as amended, or other applicable laws at the time of such payments.

2. This Note has been issued subject to representations, warranties and covenants of the original Holder hereof as contained in that certain Securities Purchase Agreement ("Agreement") of even date herewith, and subject to all restrictions, terms, conditions and disclosures in the Agreement, and may be transferred or exchanged only in compliance with the Securities Act of 1933, as amended, and applicable state and other securities laws. Prior to the due presentment for such transfer of this Note, the Company and any agent of the Company may treat the person in whose name this Note is duly registered on the Company's Note register as the owner hereof for the purpose of receiving payment as herein provided and all other purposes, whether or not this Note is overdue, and neither the Company nor any such agent shall be affected by notice to the contrary. The transferee shall be bound, as the original Holder, by the same representations and terms described herein and under the Agreement.

3. The Holder may, at such Holder's option, at any time while any sums are outstanding and unpaid hereunder, convert the then-outstanding principal amount of this Note or any portion thereof, and any interest and any penalties accrued and unpaid thereon (the "Conversion Amount"), into a number shares of fully paid and nonassessable Common Stock of the Company (the "Conversion Shares") pursuant to the following formula: the Conversion Amount divided by \$0.07 (the "Conversion Price"). The Holder may exercise the right to convert all or any portion of the Conversion Amount by delivering to the Company (i) an executed and completed notice of conversion in the form attached to this Note (the "Notice of Conversion") to the Company and (ii) this Note. The business day on which a Notice of Conversion and this Note are delivered to the Company in accordance with the provisions hereof shall be deemed a "Conversion Date." The Company will transmit the certificates representing Conversion Shares issuable upon such conversion of this Note within a reasonable time after the Conversion Date to the Holder electronically through the Company's transfer agent by means of a direct registration system ("DRS"). Physical stock certificates will be issued upon written request subject to shipping cost paid by holder of the Shares. No fractional shares shall be issued upon conversion of this Note. The amount of any of the Conversion Amount which is less than a whole share of Common Stock shall be paid to the Holder in cash. Any delay due to such circumstance shall not be an event of default under this Note.

4. The principal amount of this Note, and any accrued interest thereon, shall be reduced as per that principal amount indicated on the Notice of Conversion upon the proper receipt by the Holder of such Conversion Shares due upon such Notice of Conversion.

5. The number of Conversion Shares shall be adjusted as follows:

a. If the Company shall at any time after the Issuance Date subdivide its outstanding shares of Common Stock into a greater number of shares of Common Stock, the number of Conversion Shares in effect immediately prior to such subdivision shall be proportionately increased, and conversely, in case the outstanding shares of Common Stock shall be combined into a smaller number of shares of Common Stock, the Conversion Price in effect immediately prior to such combination shall be proportionately reduced.

b. If the Company shall at any time or from time to time after the Issuance Date makes, or fixes a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in additional shares of Common Stock, then and in each such event the number of Conversion Shares issuable upon conversion of this Note shall be proportionately increased; provided, however, that if such record date is fixed and such dividend is not fully paid, or if such distribution is not fully made on the date fixed therefor, the number of Conversion Shares shall be recomputed to reflect that such dividend was not fully paid or that such distribution was not fully made.

c. If Company at any time or from time to time after the Issuance Date makes, or fixes a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in securities of Company other than shares of Common Stock, then and in each such event provision shall be made so that Holder shall receive upon exercise of the conversion right of this Note, in addition to the number of shares of Common Stock receivable thereupon, the amount of securities of Company which Holder would have received had the Conversion Amount of this Note been exercised on the date of such event and had it thereafter, during the period from the date of such event to and including the date of conversion or purchase, retained such securities receivable during such period.

d. If the Common Stock issuable upon the conversion of this Note or option to purchase is changed into the same or a different number of shares of any class or classes of stock, whether by recapitalization, reclassification or otherwise (other than a transaction described elsewhere in Section 5 of this Note), then, and in any such event, each Holder shall have the right thereafter, upon conversion of this Note or purchase pursuant to option to receive the kind and amount of stock and other securities and property receivable upon such reorganization or other change, in an amount equal to the amount that Holder would have been entitled to had it immediately prior to such reorganization, reclassification or change converted this Note, but only to the extent this Note is actually converted, all subject to further adjustment as provided herein.

6. No provision of this Note shall alter or impair the obligation of the Company, which is absolute and unconditional, upon an Event of Default (as defined below), to pay the principal of, and interest on this Note at the place, time, and rate, and in the coin or currency herein prescribed.

a. Events of Default. Each of the following occurrences is hereby defined as an "Event of Default:"

Nonpayment. The Company shall fail to make any payment of principal, interest, or other amounts payable hereunder when and as due; or

Dissolutions, etc. The Company or any subsidiary shall fail to comply with any provision concerning its existence or any prohibition against dissolution, liquidation, merger, consolidation or sale of assets; or

Noncompliance with this Agreement. The Company shall fail to comply in any material respect with any provision hereof, which failure does not otherwise constitute an Event of Default; or

Insolvency. The institution of bankruptcy, insolvency, reorganization or liquidation proceedings or other proceedings for relief under any bankruptcy law or any law for the relief of debtors shall be instituted by or against Company, which proceedings shall not have been vacated by appropriate court order within sixty (60) days of such institution.

If one or more "Events of Default" shall occur, then, or at any time thereafter, and in each and every such case, unless such Event of Default shall have been waived in writing by the Holder (which waiver shall not be deemed to be a waiver of any subsequent default) or cured as provided herein, at the option of the Holder, and in the Holder's sole discretion, the Holder may elect to consider this Note (and all interest through such date) immediately due and payable. In order to so elect, the Holder must deliver written notice of the election and the amount due to the Company via certified mail, return receipt requested, at the Company's address as set forth herein (or any other address provided to the Holder), and thereafter the Company shall have thirty (30) business days upon receipt to cure the Event of Default or pay this Note, or convert the amount due on the Note pursuant to the conversion formula set forth above.

7. In case any provision of this Note is held by a court of competent jurisdiction to be excessive in scope or otherwise invalid or unenforceable, such provision shall be adjusted rather than voided, if possible, so that it is enforceable to the maximum extent possible, and the validity and enforceability of the remaining provisions of this Note will not in any way be affected or impaired thereby.

8. This Note does not entitle the Holder hereof to any voting rights or other rights as a shareholder of the Company prior to the conversion into Common Stock thereof, except as provided by applicable law. If, however, at the time of the surrender of this Note and conversion the Holder hereof shall be entitled to convert this Note, the Conversion Shares so issued shall be and be deemed to be issued to such holder as the record owner of such shares as of the close of business on the Conversion Date.

9. The Holder shall pay all issue and transfer taxes and other incidental expenses in respect of the issuance of certificates for Conversion Shares upon the conversion of this Note, and such certificates shall be issued in the name of the Holder of this Note.

10. This Note may be prepaid in whole or in part at any time or from time to time without premium or penalty upon 10 days' prior written notice from the Company to the Holder.

11. Upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Note, and in case of loss, theft or destruction of this Note, upon delivery of an indemnity agreement or security reasonably satisfactory in form and amount to the Company or, in the case of any such mutilation, upon surrender and cancellation of such Note, and upon reimbursement to the Company of all reasonable expenses incidental thereto, the Company will make and deliver to the Holder, in lieu thereof, a new Note in substantially identical form.

12. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall be a Saturday or a Sunday or shall be a legal holiday in the United States or the State of California, then such action may be taken or such right may be exercised on the next succeeding business day.

13. (a) This Note shall be governed by and construed in accordance with the laws of the State of California applicable to contracts made and to be performed wholly within such state.

(b) Except as otherwise provided herein, any notice or demand which, by the provisions hereof, is required or which may be given to or served upon the parties hereto shall be in writing and, if by e-mail or facsimile transmission, shall be deemed to have been validly served, given or delivered when sent, and if by personal delivery, shall be deemed to have been validly served, given or delivered upon actual delivery and, if mailed, shall be deemed to have been validly served, given or delivered three (3) business days after deposit in the United States mails, as registered or certified mail, with proper postage prepaid and addressed to the party or parties to be notified.

(c) The Holder acknowledges that the Conversion Shares acquired upon the exercise of this Note will have restrictions upon its resale imposed by state and federal securities laws, together with other restrictions, terms, conditions and disclosures as fully set forth in the Agreement.

(d) With regard to any power, remedy or right provided herein or otherwise available to any party hereunder (i) no waiver or extension of time shall be effective unless expressly contained in a writing signed by the waiving party; and (ii) no alteration, modification or impairment shall be implied by reason of any previous waiver, extension of time, delay or omission in exercise, or other indulgence.

(e) This Note may not be amended, altered or modified except by a writing signed by the Company and the Holder.

IN WITNESS WHEREOF, the Company has caused this Convertible Note to be duly executed by an officer thereunto duly authorized.

QS ENERGY, INC.
23902 FM 2978
Tomball, TX 77375

By _____
Name: Mike McMullen
Title: Chief Financial Officer

ACKNOWLEDGED AND ACCEPTED:

Investor Name (Signature)

Print Name

Investor Address

NOTICE OF EXERCISE OF CONVERSION RIGHT

TO: (Company Name)

(1) The undersigned hereby elects to convert \$ _____ of the attached Note into _____ shares of Common Stock (the "Shares") of QS Energy, Inc. ("Company") pursuant to the terms of the attached Note.

(2) Please issue a certificate or certificates representing the Shares in the name of the undersigned or in such other name as is specified below:

(Print Name)

Address:

(3) The Company shall issue the Shares electronically through its transfer agent by means of a direct registration system ("DRS")¹. Physical stock certificates will be issued upon written request subject to shipping cost paid by holder of the Shares.

(4) The undersigned confirms that the Shares are being acquired for the account of the undersigned for investment only and not with a view to, or for resale in connection with, the distribution thereof and that the undersigned has no present intention of distributing or selling the Shares.

(5) The undersigned accepts such shares subject to the restrictions on transfer and other terms, conditions and disclosures set forth in the attached Note and set forth in that certain Securities Purchase Agreement between the Company and the undersigned dated as of the date of the attached Note.

(Date)

(Signature)

(Print Name)

¹ The Company's transfer agent, Nevada Agency and Transfer Company ("NATCO") is a participant in the Depository Trust Company's FAST program. The FAST program allows NATCO to provide DWAC (deposit/withdrawal at custodian) and DRS (direct registration system) services to the Company and its shareholders. This eliminates the risk of lost certificates and courier fees by providing electronic transfers.

EXHIBIT B

STOCK PURCHASE WARRANT

THIS WARRANT AND ANY SHARES ISSUED UPON ITS EXERCISE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), AND HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF. NO SUCH SALE OR DISPOSITION OF ANY SHARES ISSUED UPON EXERCISE HEREOF MAY BE AFFECTED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL SATISFACTORY IN FORM AND SUBSTANCE TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE ACT. THE TRANSFER OF THIS WARRANT IS RESTRICTED AS SET FORTH HEREIN.

No. _____

_____, 2019

QS ENERGY, INC.
WARRANT TO PURCHASE COMMON STOCK

VOID AFTER 5:00 P.M. (Pacific Time) ON _____, 2020

THIS CERTIFIES that, for the value received, the holder identified on the last page of this Warrant _____ (the "Holder") is entitled, upon the terms and subject to the conditions hereinafter set forth, at any time on or after the date of this Warrant and on or prior to 5:00 p.m. P.S.T. on the first anniversary of the date of this Warrant (the "Expiration Time"), but not thereafter, to subscribe for and purchase, from QS ENERGY, INC., a Nevada corporation (the "Company"), up to _____ (#) shares of the Company's Common Stock (the "Shares") at a purchase price per share equal to \$0.07 (the "Exercise Price").

1. Exercise of Warrant.

The purchase rights represented by this Warrant are exercisable by the Holder, in whole or in part, at any time after the date of this Warrant and before the Expiration Time by the surrender of this Warrant and the Notice of Exercise annexed hereto duly executed at the office of the Company, in Tomball, Texas (or such other office or agency of the Company as it may designate by notice in writing to the Holder at the address of the Holder appearing on the books of the Company), and upon payment of an amount equal to the aggregate Exercise Price for the number of Shares thereby purchased (by cash or by check or certified bank check payable to the order of the Company in an amount equal to the purchase price of the shares thereby purchased); whereupon the Holder shall be entitled to receive a stock certificate representing the number of Shares so purchased. The Company agrees that if at the time of the surrender of this Warrant and purchase of the Shares, and the Holder shall be entitled to exercise this Warrant, the Shares so purchased shall be and be deemed to be issued to such holder as the record owner of such Shares as of the close of business on the date on which this Warrant shall have been exercised as aforesaid.

Upon partial exercise of this Warrant, the Holder shall be entitled to receive from the Company a new Warrant in substantially identical form for the purchase of that number of Shares as to which this Warrant shall not have been exercised. Certificates for Shares purchased hereunder shall be delivered to the Holder within a reasonable time after the date on which this Warrant shall have been exercised as aforesaid.

2. No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant. With respect to any fraction of a share called for upon the exercise of this Warrant, an amount equal to such fraction multiplied by the Exercise Price shall be paid in cash to the Holder.

3. Charges, Taxes and Expenses. The Holder shall pay all issue and transfer taxes and other incidental expenses in respect of the issuance of certificates for Shares upon the exercise of this Warrant, and such certificates shall be issued in the name of the Holder of this Warrant.

4. No Rights as a Stockholder. This Warrant does not entitle the Holder to any voting rights or other rights as a stockholder of the Company prior to the exercise hereof.

5. Loss, Theft, Destruction or Mutilation of Warrant. Upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Warrant, and in case of loss, theft or destruction of this Warrant, upon delivery of an indemnity agreement or security reasonably satisfactory in form and amount to the Company or, in the case of any such mutilation, upon surrender and cancellation of such Warrant, and upon reimbursement to the Company of all reasonable expenses incidental thereto, the Company will make and deliver to the Holder, in lieu thereof, a new Warrant in substantially identical form and dated as of such cancellation.

6. Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall be a Saturday or a Sunday or shall be a legal holiday in the United States or the State of California, then such action may be taken or such right may be exercised on the next succeeding business.

7. Merger, Reclassification, etc.

(a) Merger, etc. If at any time the Company proposes (A) the acquisition of the Company by another entity by means of any transaction or series of related transactions (including, without limitation, any reorganization, merger, consolidation or stock issuance) that results in the transfer of fifty percent (50%) or more of the then outstanding voting power of the Company; or (B) a sale of all or substantially all of the assets of the Company, then the Company shall give the Holder ten (10) days notice of the proposed effective date of the transaction. If, in the case of such acquisition of the Company, and the Warrant has not been exercised by the effective date of the transaction, this Warrant shall be exercisable into the kind and number of shares of stock or other securities or property of the Company or of the entity resulting from such merger or acquisition to which such Holder would have been entitled if immediately prior to such acquisition or merger, it had exercised this Warrant. The provisions of this Section 7(a) shall similarly apply to successive consolidations, mergers, sales or conveyances.

(b) Reclassification, etc. If the Company at any time shall, by subdivision, combination or reclassification of securities or otherwise, change any of the securities to which purchase rights under this Warrant exist into the same or a different number of securities of any class or classes, this Warrant shall thereafter be to acquire such number and kind of securities as would have been issuable as the result of such change with respect to the securities which were subject to the purchase rights under this Warrant immediately prior to such subdivision, combination, reclassification or other change. If the Shares are subdivided or combined into a greater or smaller number of Shares, the Exercise Price under this Warrant shall be proportionately reduced in case of subdivision of shares or proportionately increased in the case of combination of shares, in both cases by the ratio which the total number of Shares to be outstanding immediately after such event bears to the total number of Shares outstanding immediately prior to such event.

(c) Cash Distributions. No adjustment on account of cash dividends or interest on the Shares or other securities purchasable hereunder will be made to the Exercise Price under this Warrant.

8. Restrictions on Transfer.

(a) Restrictions on Transfer of Shares. In no event will the Holder make a disposition of this Warrant or the Shares unless and until, if requested by the Company, it shall have furnished the Company with an opinion of counsel satisfactory to the Company and its counsel to the effect that appropriate action necessary for compliance with the Securities Act of 1933, as amended (the "Act") relating to sale of an unregistered security has been taken. Notwithstanding the foregoing, the restrictions imposed upon the transferability of the Shares shall terminate as to any particular Share when (i) such security shall have been sold without registration in compliance with Rule 144 under the Act, or (ii) a letter shall have been issued to the Holder at its request by the staff of the Securities and Exchange Commission or a ruling shall have been issued to the Holder at its request by such Commission stating that no action shall be recommended by such staff or taken by such Commission, as the case may be, if such security is transferred without registration under the Act in accordance with the conditions set forth in such letter or ruling and such letter or ruling specifies that no subsequent restrictions on transfer are required, or (iii) such security shall have been registered under the Act and sold by the Holder thereof in accordance with such registration.

(b) Subject to the provisions of Section 8(a) hereof, this Warrant and all rights hereunder are transferable, in whole or in part, upon surrender of the Warrant with a properly executed assignment at the principal office of the Company.

(c) Restrictive Legends. The stock certificates representing the Shares and any securities of the Company issued with respect thereto shall be imprinted with legends restricting transfer except in compliance with the terms hereof and with applicable federal and state securities laws substantially as follows:

“THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AND MAY NOT BE SOLD, TRANSFERRED, PLEDGED OR OTHERWISE DISPOSED OF IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933 OR AN OPINION OF COUNSEL SATISFACTORY TO THE ISSUER OF THIS CERTIFICATE THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT”.

9. Miscellaneous.

(a) Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of California applicable to contracts made and to be performed wholly within such state.

(b) Restrictions. The Holder acknowledges that the Shares acquired upon the exercise of this Warrant will have restrictions upon its resale imposed by state and federal securities laws.

(c) Waivers Strictly Construed. With regard to any power, remedy or right provided herein or otherwise available to any party hereunder (i) no waiver or extension of time shall be effective unless expressly contained in a writing signed by the waiving party; and (ii) no alteration, modification or impairment shall be implied by reason of any previous waiver, extension of time, delay or omission in exercise, or other indulgence.

(d) Modifications. This Warrant may not be amended, altered or modified except by a writing signed by the Company and the Holder of this Warrant.

IN WITNESS WHEREOF, QS ENERGY, INC. has caused this Warrant to be executed by its duly authorized representative dated as of the date first set forth above.

Holder:

QS ENERGY, INC.
23902 FM 2978
Tomball, TX 77375

By: _____
Name: Mike McMullen
Title: Chief Financial Officer

NOTICE OF EXERCISE

TO: QS ENERGY, INC., a Nevada corporation

(1) The undersigned hereby elects to purchase _____ shares of Common Stock (the "Shares") of QS Energy, Inc. ("Issuer") pursuant to the terms of the attached Warrant, and tenders herewith payment of the purchase price in full, together with all applicable transfer taxes, if any.

(2) Please issue a certificate or certificates representing the Shares in the name of the undersigned or in such other name as is specified below:

Name:	Address:
_____	_____
(Print Name)	_____

(3) The Company shall issue the Shares electronically through its transfer agent by means of a direct registration system ("DRS")². Physical stock certificates will be issued upon written request subject to shipping cost paid by holder of the Shares.

(4) The undersigned confirms that he is an "accredited investor" as defined by Rule 501(a) under the Securities Act of 1933, as amended, at the time of execution of this Notice.

(5) The undersigned confirms that the Shares are being acquired for the account of the undersigned for investment only and not with a view to, or for resale in connection with, the distribution thereof and that the undersigned has no present intention of distributing or selling the Shares.

(6) The undersigned accepts such Shares subject to the restrictions on transfer set forth in the attached Warrant.

(7) The undersigned acknowledges that the Issuer has given it access to all information relating to the Issuer's business that the undersigned has requested. The undersigned has reviewed all materials relating to the Issuer's business, financial condition and operations which it has requested and the undersigned has reviewed all of such materials as the undersigned, in the undersigned's sole and absolute discretion has deemed necessary or desirable. The undersigned has had an opportunity to ask questions of and discuss the business, management and financial affairs of the Issuer with the Issuer's management. Specifically but not by way of limitation, the undersigned acknowledges the Issuer's publicly available filings made periodically with the SEC, which filings are available at www.sec.gov, and which filings the undersigned acknowledges reviewing or having had the opportunity of reviewing.

(8) The undersigned acknowledges that it has, by reason of its business and financial experience, such knowledge, sophistication and experience in financial and business matters and in making investment decisions of this type that it is capable of (i) evaluating the merits and risks of an investment in the Shares and making an informed investment decision in connection therewith; (ii) protecting its own interest; and (iii) bearing the economic risk of such investment for an indefinite period of time for shares which are not transferable or freely tradable. The undersigned hereby agrees to indemnify the Issuer and the officers, directors and employees thereof harmless against all liability, costs or expenses (including reasonable attorneys' fees) arising by reason of or in connection with any misrepresentation or any breach of warranties or representations of the undersigned contained in this Notice, or arising as a result of the sale or distribution of the Shares issuable upon exercise of the Warrants. The representations and warranties contained herein shall be binding upon the heirs, legal representatives, successors and assigns of the undersigned.

_____	_____
(Date)	(Signature)

	(Print Name)

² The Company's transfer agent, Nevada Agency and Transfer Company ("NATCO") is a participant in the Depository Trust Company's FAST program. The FAST program allows NATCO to provide DWAC (deposit/withdrawal at custodian) and DRS (direct registration system) services to the Company and its shareholders. This eliminates the risk of lost certificates and courier fees by providing electronic transfers.

Third AMENDMENT TO THE EMPLOYMENT AGREEMENT

This Third Amendment to the Employment Agreement (the “3^d Amendment”) is entered into by and between QS Energy, Inc. a Nevada corporation (“Employer”) and Jason Lane (“Employee”) (collectively, the “Parties”), effective as of November 15, 2019 (the “Effective Date”).

RECITALS

- A. Effective as of April 1, 2017, the Employer and Employee entered into an Employment Agreement, as amended, by mutual agreement of the parties on November 12, 2017 (the “Employment Agreement”);
- B. Effective as of April 1, 2019, in the Second Amendment to the Employment Agreement, the Employer and Employee agreed to an extension of the Employment Agreement for an additional three months, extending the term of the Employment Agreement until June 1, 2019;
- C. Since June 1, 2019, both the Employer and Employee have been operating consistent with the terms of the Employment Agreement, as amended, on a month-to-month basis;
- D. It is now the desire of Employer and Employee to further amend the Employment Agreement.

NOW, THEREFORE, in consideration of the promises and the mutual covenants hereinafter set forth, the Parties agree as follows:

- I. Section 3 of the Employment Agreement is hereby amended and restated as follows:

Term of Employment. Subject to earlier termination as provided in the Employment Agreement or as may be mutually agreed upon by the Parties, Employee hereby agrees to continue to be employed by Employer until February 15, 2020 (“Term”) beginning on the Effective Date of this Agreement, and Employer hereby agrees to employ Employee during such Term.

- II. Section 4.1 of the Employment Agreement is hereby amended and restated as follows:

Base Salary. Employee shall not receive any cash compensation during the Term.

- III. Section 4.2 of the Employment Agreement is hereby amended and restated as follows:

Options. As an inducement to Employee to agree to his employment with Employer pursuant to the terms and conditions of this Agreement, as amended Employer agrees to issue to Employee options to purchase 300,000 shares of restricted common stock of the Company (the “Options”) The Options shall vest pursuant to a three (3) month vesting schedule, with 100,000 Options each vesting during the Term on each monthly anniversary date of the Effective Date. All of the Options shall be priced as of market price at the close of market on November 15, 2019. Notwithstanding the foregoing, if this Agreement is terminated for any reason, except for termination by Employer Without Cause (defined below), all unvested Options shall terminate and be of no force or effect. The Options shall expire ten (10) years from the date hereof, and shall be of no force or effect thereafter. In connection with Employee’s agreement to accept the Options hereunder, Employee agrees and acknowledges the following:

- (i) Employee is aware of Employer’s business affairs and financial condition, and has been advised to review Employer’s SEC filings, which may be accessed online at www.sec.gov. Employee has had an opportunity to ask questions and receive answers from Employer regarding its business and the Options.
- (ii) Employee acknowledges that the acceptance of the Options involves a high degree of risk, and that the stock to be issued in connection therewith may need to be held for an indefinite period of time.
- (iii) Employee acknowledges that he is acquiring the Options for his personal account, for investment purposes only, and not with a view to or for resale in connection with any distribution of the Options. Employee also understands that the Options and the shares to be issued in connection with the Options will not be registered under federal or state securities laws by reason of specific exemptions thereunder.

(iv) Employee understands that the Options to be issued and shares to be issued in connection therewith are “restricted securities” under applicable federal securities laws and that Employee may dispose of the shares only pursuant to an effective registration statement under federal securities laws or exemption therefrom.

IV. If there are any inconsistencies between the Employment Agreement and this 3rd Amendment, the terms and conditions of this 3rd Amendment shall control.

V. Except for the changes set forth in this 3rd Amendment, all terms and conditions in the Employment Agreement shall remain unchanged and in full force and effect.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the Effective Date.

“EMPLOYER”

QS ENERGY, INC.

Date:

By:

Michael McMullen, CFO

“EMPLOYEE”

Date:

Jason Lane

SECOND AMENDMENT TO THE EMPLOYMENT AGREEMENT

This Second Amendment to the Employment Agreement (the "2nd Amendment") is entered into by and between QS Energy, Inc. a Nevada corporation ("Employer") and Michael McMullen ("Employee") (collectively, the "Parties"), effective as of November 15, 2019 (the "Effective Date").

RECITALS

- A. Effective as of April 1, 2017, the Employer and Employee entered into an Employment Agreement (the "Employment Agreement"), expiring on March 31, 2019;
- B. Effective as of April 1, 2019, in the First Amendment to the Employment Agreement, the Employer and Employee agreed to an extension of the Employment Agreement for an additional three months, extending the term of the Employment Agreement until June 1, 2019;
- C. Since June 1, 2019, both the Employer and Employee have been operating consistent with the terms of the Employment Agreement, as amended, on a month-to-month basis;
- D. It is now the desire of Employer and Employee to further amend the Employment Agreement.

NOW, THEREFORE, in consideration of the promises and the mutual covenants hereinafter set forth, the Parties agree as follows:

- I. Section 4 of the Employment Agreement is hereby amended and restated as follows:

Term of Employment. Subject to earlier termination as provided in the Employment Agreement, as amended, or as may be mutually agreed upon by the Parties, Employee hereby agrees to continue to be employed by Employer until February 15, 2020 ("Term") beginning on the Effective Date of this Agreement, and Employer hereby agrees to employ Employee during such Term.

- II. If there are any inconsistencies between the Employment Agreement, as amended, and this 2nd Amendment, the terms and conditions of this 2nd Amendment shall control.
- III. Except for the changes set forth in this 2nd Amendment, all terms and conditions in the Employment Agreement, as amended, shall remain unchanged and in full force and effect.

[Intentionally Left Blank]

IN WITNESS WHEREOF, the Parties have executed this Second Amendment to the Employment Agreement as of the Effective Date.

“EMPLOYER”

QS ENERGY, INC.

Date:

By:

Jason Lane, CEO

“EMPLOYEE”

Date:

Michael McMullen

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: November 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: November 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 September 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: November 14, 2019

/s/ Jason Lane

Jason Lane
Chief Executive Officer

Date: November 14, 2019

/s/ Michael McMullen

Michael McMullen
Chief Financial Officer