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 March 31, 2020

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.)

Name of each exchange on which registered

N/A

23902 FM 2978 Tomball, TX 77375

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

(281)-738-1893

(Registrant's telephone number, including area code)

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

Title of each class None

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 \boxtimes No \square

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 \boxtimes No \square

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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 \square Non-accelerated filer \boxtimes Emerging growth company \square 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 June 23, 2020 was 320,653,000.

EXPLANATORY NOTE

As disclosed in a Current Report on Form 8-K filed with the Securities and Exchange Commission ("SEC"), on May 15, 2020, we delayed the filing of this Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, due to the impact of the coronavirus COVID-19 ("COVID-19") pandemic that made it more difficult, and therefore it has taken us more time, to finish our analysis and compile certain information necessary to make key assessments and estimates.

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

	March 31, 2020 (unaudited)		l	December 31, 2019
ASSETS				
Current assets:				
Cash	\$	274,000	\$	479,000
Prepaid expenses and other current assets		55,000		96,000
Total current assets		329,000		575,000
Property and equipment, net of accumulated depreciation of \$82,000 and \$80,000 at March 31, 2020 and December 31, 2019, respectively		21,000		23,000
Other assets		2,000		2,000
Total assets	\$	352,000	\$	600,000
LIABILITIES AND STOCKHOLDERS' DEFICIT				
Current liabilities:				
Accounts payable-license agreements	\$	1,314,000	\$	1,255,000
Accounts payable and accrued expenses		649,000		557,000
Accrued expenses and accounts payable-related parties		5,000		7,000
Convertible debentures, net of discounts of \$86,000 and \$153,000 at March 31, 2020 and December 31, 2019, respectively		983,000		1,050,000
Total current liabilities		2,951,000		2,869,000
Commitments and contingencies				
Stockholders' deficit				
Common stock, \$.001 par value: 500,000,000 shares authorized, 314,972,209 and 310,111,536 shares issued and outstanding at March 31, 2020 and December 31, 2019, respectively		314.972		310,111
Additional paid-in capital		116,641,028		116,209,889
Accumulated deficit		(119,555,000)		(118,789,000)
Total stockholders' deficit		(2,599,000)		(2,269,000)
Total liabilities and stockholders' deficit	\$	352,000	\$	600,000

See notes to condensed consolidated financial statements.

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

		nonths ended arch 31,
	2020	2019
Revenues	<u>\$</u>	<u> </u>
Costs and Expenses		
Operating expenses	532,00	478,000
Research and development expenses	70,00	151,000
Loss from operations	(602,00	(629,000)
Other expense		
Interest and financing expense	(164,00	0) (1,653,000)
Net Loss	\$ (766,00	<u>)</u> <u>\$ (2,282,000)</u>
Net loss per common share, basic and diluted	\$ (0.0)) \$ (0.01)
Weighted average common shares outstanding, basic and diluted	311,063,68	265,880,777

See notes to condensed consolidated financial statements.

QS ENERGY, INC. CONDENSED CONSOLIDATED STATEMENT OF STOCKHOLDERS' DEFICIT, UNAUDITED FOR THE THREE MONTHS ENDED MARCH 31, 2020 AND MARCH 31, 2019

	Common Stock				Additional Paid-in	1	Accumulated	St	Total ockholders'		
	Shares		Amount	Capital		Capital Deficit		Capital J			Deficit
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	1,962,153		1,962		170,038		-		172,000		
Fair value of common stock issued on conversion of notes											
payable	36,719,820		36,720		1,799,280		-		1,836,000		
Fair value of warrants and beneficial conversion feature of											
issued convertible notes	_		-		668,000		-		668,000		
Fair value of options and warrants issued as compensation	_		-		99,000		-		99,000		
Net loss	_		_		_		(2,282,000)		(2,282,000)		
Balance, March 31, 2019	294,805,488	\$	294,805	\$	114,166,195	\$	(115,450,000)	\$	(989,000)		

	Commo	on Stock	κ		Additional Paid-in	ł	Accumulated	St	Total ockholders'
	Shares		Amount	Capital		Capital Deficit		Deficit	
Balance, January 1, 2020	310,111,536	\$	310,111	\$	116,209,889	\$	(118,789,000)	\$	(2,269,000)
Common stock issued on exercise of warrants and options	1,215,000		1,215		59,785		-		61,000
Fair value of common stock issued on conversion of notes									
payable	3,645,673		3,646		215,354		-		219,000
Fair value of warrants and beneficial conversion feature of									
issued convertible notes	_		-		35,000		_		35,000
Fair value of options and warrants issued as compensation	_		-		121,000		-		121,000
Net loss	-		_		_		(766,000)		(766,000)
Balance, March 31, 2020	314,972,209	\$	314,972	\$	116,641,028	\$	(119,555,000)	\$	(2,599,000)

See notes to condensed consolidated financial statements.

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

		Three months ended March 31,		
		2020		2019
Cash flows from Operating Activities				
Net loss	\$	(766,000)	\$	(2,282,000)
Adjustments to reconcile net loss to net cash used in operating activities:				
Stock based compensation expense		121,000		99,000
Amortization of debt discount and accrued interest		152,000		1,632,000
Depreciation and amortization		2,000		1,000
Changes in operating assets and liabilities:				
Prepaid expenses and other current assets		41,000		(457,000)
Accounts payable and accrued expenses		92,000		(100,000)
Accounts payable – license agreements		59,000		68,000
Accounts payable and accrued expenses – related parties		(2,000)		(30,000)
Net cash used in operating activities		(301,000)		(1,069,000)
Cash flows from financing activities				
Net proceeds from issuance of convertible notes and warrants		35,000		668,000
Net proceeds from exercise of warrants and options		61,000		172,000
Net cash provided by financing activities		96,000		840,000
Net increase (decrease) in cash	-	(205,000)		(229,000)
Cash, beginning of period		479,000		1,153,000
Cash, end of period	\$	274,000	\$	924,000
Supplemental disclosures of cash flow information				
Cash paid during the year for:				
Interest	\$	-	\$	-
Income Taxes	\$	_	\$	_
Non-cash investing and financing activities				
Conversion of convertible debentures to common stock	\$	219,000	\$	1,836,000
Fair value of warrants and beneficial conversion feature associated with issued convertible notes		35,000		668,000

See notes to condensed consolidated financial statements.

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QS ENERGY, INC. NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS, UNAUDITED THREE MONTHS ENDED MARCH 31, 2020 AND 2019

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, 2020 filed with the SEC. The condensed consolidated balance sheet as of December 31, 2019 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 three-months ended March 31, 2020, the Company incurred a net loss of \$766,000, used cash in operations of \$301,000 and had a stockholders' deficit of \$2,599,000 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, 2019 financial statements, has raised substantial doubt about the Company's ability to continue as a going concern.

At March 31, 2020, the Company had cash on hand in the amount of \$274,000. Management estimates that the current funds on hand will be sufficient to continue operations through July 2020. 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 product; 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 2020 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 March 31, 2020 and 2019, we excluded the outstanding securities summarized below, which entitle the holders thereof to acquire shares of common stock as their effect would have been anti-dilutive.



	March 31,	March 31,
	2020	2019
Options	42,390,601	39,711,022
Warrants	6,749,883	26,102,430
Common stock issuable upon conversion of notes payable	3,645,673	11,058,950
Total	52,786,157	76,872,402

<u>Estimates</u>

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.

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 twelve months ended December 31, 2019, the Company amortized \$483,000 of such amount as a research and development cost based on the progress of work performed as required by the contract, and reflected the \$17,000 remaining amount as Prepaid expenses and other current assets in the accompanying consolidated balance sheet as of December 31, 2019. In March 2020, the Company paid an additional \$25,000 as a deposit under terms of a work order for additional work to be performed by a pipeline operator. During the three-month periods ended March 31, 2020, the Company amortized \$17,000 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 \$25,000 remaining amount as Prepaid expenses and other current assets in the accompanying consolidated balance sheet as of March 31, 2020.

For the three-month periods ended March 31, 2020 and 2019 research and development costs were \$70,000 and \$151,000, respectively.

Patent Costs

Patent costs consist of patent-related legal and filing fees. Due to the uncertainty associated with the successful development of our AOT product, all patent costs are expensed as incurred. During the three-month periods ended March 31, 2020 and 2019, patent costs were \$6,000 and \$7,000, respectively, and were 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 March 31, 2020 and December 31, 2019, the Company owed \$197,000 and \$207,000, respectively, pursuant to a separation agreement with a former executive officer effective April 1, 2017 as amended by letter agreements dated effective August 16, 2018 and March 31, 2019 which included as part of Accrued expenses and accounts payable on the accompanying balance sheet. The amount is to be repaid at an amount of \$10,000 per month. During the three months ended March 31, 2020 the Company made \$10,000 in payments reducing the outstanding balance to \$197,000.

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 March 31, 2020, and December 31, 2019, accrued expenses and accounts payable to related parties amounted to \$5,000 and \$7,000, respectively.

4. Property and Equipment

At March 31, 2020 and December 31, 2019, property and equipment consists of the following:

	March 3 2020 (unaudite	·	Dec	cember 31, 2019
Office equipment	\$	36,000	\$	36,000
Furniture and fixtures		5,000		5,000
Testing Equipment		37,000		37,000
Leasehold Improvements		25,000		25,000
Subtotal		103,000		103,000
Less accumulated depreciation		(82,000)		(80,000)
Total	\$	21,000	\$	23,000

Depreciation expense for the three-month periods ended March 31, 2020 and 2019 was \$2,000 and \$1,000, respectively.

5. Convertible Notes

	N	larch 31,		
	2020 (unaudited)			cember 31,
				2019
Balance due on convertible notes	\$	854,000	\$	1,019,000
Accrued interest		215,000		184,000
Subtotal		1,069,000		1,203,000
Convertible note discount		(86,000)		(153,000)
Balance on convertible notes, net of note discounts	\$	983,000	\$	1,050,000

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

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

As of December 31, 2019, total outstanding notes payable amounted to \$1,019,000 which are due through December 2019 and unamortized note discount of \$153,000.

During the three-month periods ended March 31, 2020, the Company issued similar convertible promissory notes in the aggregate of \$39,000 for cash of \$35,000 or a discount of \$4,000. 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 \$0.035 per share. In addition, the Company also granted these note holders warrants to purchase 550,000 shares of the Company' common stock. The warrants are fully vested, exercisable at \$0.035 per share and will expire in one year. As a result, the Company recorded a note discount of \$35,000 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 three-month period ended March 31, 2020 notes payable of \$219,000 were converted into 3,645,673 shares of common stock.

As of March 31, 2020, total outstanding notes payable amounted to \$854,000, accrued interest of \$215,000 and unamortized note discount of \$86,000 for a net balance of \$983,000. A total of sixteen notes in the aggregate of \$600,000 have reached maturity and are past due.

6. Research and Development

The Company constructs, develops and tests the AOT technologies with internal resources and through the assistance of various third-party entities. Costs incurred and expensed include fees such as license fees, 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 three-month periods ended March 31, 2020 and 2019, our research and development expenses were \$70,000 and \$151,000, 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 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 year ended December 31, 2019, the Company incurred costs related to a work order for work to be performed by a pipeline operator under which the Company paid a \$500,000 deposit in advance of work to be performed. During the period ended December 31, 2019, the Company amortized \$483,000 of such amount as a research and development cost based on the progress of work performed as required by the contract, and reflected the \$17,000 remaining amount on deposit as Prepaid expenses and other current assets in the accompanying consolidated balance sheet as of December 31, 2019. During the period ended March 31, 2020, the Company amortized the remaining \$17,000 of such amount as a research and development cost based on the progress of work performed as required by the contract.

During the period ended March 31, 2020, the work order was increased by \$25,000 and the Company paid an additional \$25,000 deposit in advance of work to be performed, and has reflected the \$25,000 remaining amount on deposit as Prepaid expenses and other current assets in the accompanying consolidated balance sheet as of March 31, 2020.

Temple University Licensing Agreements

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 licensies 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 three-month period ended March 31, 2020 and 2019 pursuant to these two License Agreements amounted to \$47,000 and has been reflected in Research and Development expenses on the accompanying consolidated statements of operations. In the three-month periods ended March 31, 2020 and 2019, the Company also recognized penalty interest on past-due balances of \$12,000 and \$21,000, respectively, which is included as part of interest and financing expense in the accompanying statements of operations.

As of March 31, 2020 and December 31, 2019, total unpaid fees due to Temple pursuant to these agreements are \$1,314,000 and \$1,255,000, 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 \$1,179,000 are deemed past due. The Company is currently in discussions with Temple to settle or cure the past due balance.

No revenues were earned from the two License Agreements during the three-month periods ended March 31, 2020 and March 31,2019.



7. Common Stock

During the three months ended March 31, 2020, the Company issued 4,860,673 shares of its common stock as follows:

- The Company issued 3,645,673 shares of its common stock upon the conversion of \$219,000 in convertible notes pursuant to the convertible notes conversion prices of \$0.05 to \$0.15 per share.
- The Company issued 1,155,000 shares of its common stock upon the exercise of warrants for proceeds of \$58,000 at exercise prices of \$0.05 per share.
- The Company issued 60,000 shares of its common stock upon the exercise of options for proceeds of \$3,000 at exercise prices of \$0.05 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 March 31, 2020 was 4.8 years. Stock option activity for the period January 1, 2020 up to March 31, 2020, was as follows:

	Options			
January 1, 2020	39,750,603	\$ 0.20		
Granted	2,699,998	\$ 0.14		
Exercised	(60,000)	\$ 0.05		
Forfeited	_	\$ -		
March 31, 2020	42,390,601	\$ 0.20		

The weighted average exercise prices, remaining contractual lives for options granted, exercisable, and expected to vest as of March 31, 2020 were as follows:

Outstanding Options				Exercisat	ole Option	15	
Option Exercise Price		Weighted Life Average Exercise			Av	Weighted erage Exercise	
Per Share	Shares	(Years)		Price	Shares		Price
\$0.05 - \$0.24	20,855,551	7.6	\$	0.10	18,880,553	\$	0.10
\$0.25 - \$0.49	20,913,552	2.0		0.27	20,913,552		0.27
\$0.50 - \$0.99	471,052	4.1		0.85	471,052		0.85
\$1.00 - \$2.00	150,446	3.3		1.18	150,446		1.18
	42,390,601	4.8		0.20	40,415,603		0.20

During the three-month period ending March 31, 2020, and pursuant to the Company's Board Compensation policy approved by the Board June 19, 2015, the Company granted options to purchase 2,699,998 shares of common stock to members of the Company's Board of Directors and an executive officer under terms of an employment agreement. The options are exercisable at \$0.03 to \$0.15 per 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 \$338,000 using the Black-Scholes Option Pricing model with the following assumptions: life of 5.5 years; risk free interest rate of 1.6% to 1.7%; volatility of 128% to 138% and dividend yield of 0%.

During the three-month periods ended March 31, 2020 and 2019, the Company recognized compensation costs based on the fair value of options that vested of \$115,000 and \$99,000 respectively.

During the three-month periods ended March 31, 2020, a Board Member exercised an option to purchase 60,000 shares of common stock at an exercise price of \$0.05 per share for a total exercise price of \$3,000.

At March 31, 2020, the Company's closing stock price was \$0.07 per share. The aggregate intrinsic value of the options outstanding at March 31, 2020 was \$133,000. Future unamortized compensation expense on the unvested outstanding options at March 31, 2020 is approximately \$245,000 to be recognized through December 2020.

<u>Warrants</u>

The following table summarizes certain information about the Company's stock purchase warrants activity for the period starting January 1, 2020 up to March 31, 2020.

		We	eighted Avg.
	Warrants	Exercise Price	
January 1, 2020	13,065,084	\$	0.11
Granted	649,999		0.04
Exercised	(1,155,000)		0.05
Cancelled	(5,810,200)		0.05
March 31, 2020	6,749,883	\$	0.17

The weighted average exercise prices, remaining contractual lives for warrants granted, exercisable, and expected to vest as of March 31, 2020 were as follows:

	(Outstanding Warrants				Exercisable Warrants			
Warrant Exercise Price		Life	0	ted Average		0	ed Average		
Per Share	Shares	(Years)	Exer	cise Price	Shares	Exer	cise Price		
\$0.05 - \$0.24	4,679,883	0.7	\$	0.10	4,646,550	\$	0.11		
\$0.25 - \$0.49	2,000,000	1.6		0.30	2,000,000		0.30		
\$0.50 - \$1.00	70,000	4.1		0.80	70,000		0.80		
	6,749,883	1.0		0.17	6,716,550		0.17		

In the three-month period ending March 31, 2020, pursuant to terms of convertible notes issued, the Company granted warrants to purchase 550,000 shares of common stock with an exercise price of \$.05 per share, vesting immediately upon grant and expiring one year from the date of grant (see Note 5, above).

In the three-month period ending March 31, 2020, the Company issued warrants to purchase 99,999 shares of common stock in exchange for services. The warrants are exercisable at a price of \$0.04 to \$0.14, vesting one month from the date of grant and expiring two years from the date of grant. Total fair value of these options at grant date was \$7,000 using the Black-Scholes Option Pricing model with the following assumptions: life of 2 years; risk free interest rate of 0.4% to 1.5%; volatility of 163% to 173% and dividend yield of 0%. During the three-month periods ended March 31, 2020, the Company recognized compensation costs based on the fair value of warrants that vested of \$7,000.

During the three-month period ended March 31, 2020, warrants to acquire 1,155,000 shares of common stock were exercised resulting in net proceeds to the Company of \$58,000.

At March 31, 2020, the aggregate intrinsic value of the warrants outstanding was \$20,000.

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.

QS Energy is working to maintain normal operations during the current COVID-19 pandemic under social distancing and shelter-in-place guidelines as recommended or required by the CDC, federal, state and county government agencies. The Company has moved many operational functions to the cloud. Our employees can perform most vital functions remotely. Most day-to-day operations have been minimally impacted by COVID-19. It is unclear what impact COVID-19 may have on our supply chain, or on our ability to operate on-site at the demonstration project. The Company has experienced delays and cost overruns due to COVID-19 impacts on our supply chain. We have not been made aware of any COVID-19 restrictions at the demonstration site that would impact our ability to restart our demonstration testing. No assurances can be made that COVID-19 will not materially affect our supply chain, will not negatively affect access to the demonstration site, restrict operations at the demonstration site, or negatively impact our ability to fund continued operations.

10. Subsequent Events

Unregistered Sales of Equity Securities

From March 1, 2020, through June 23, 2020, the Company issued and sold to accredited US investors an aggregate of \$230,000 Convertible Promissory Notes (the "Notes") and warrants to purchase an aggregate of 2,735,238 shares of common stock (the "Warrants"). The Company received proceeds from the private placement of \$209,000, 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 \$0.035 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 \$0.035 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 to U.S. "accredited investors," as the term is defined in Regulation D under the Securities Act of 1933, as amended (the "Securities Act"), and was 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.

Of these aggregate amounts, the Company received proceeds of \$174,000 on the sale of \$191,000 in Notes and Warrants to purchase 2,735,238 shares of common stock were purchased subsequent to the March 31, 2020 reporting date of this Form 10-Q.

A copy of the offering is attached hereto as Exhibit 10.2.



Conversion of Convertible Notes

From April 1, 2020 up to June 26, 2020, Company issued 5,680,791 shares of common stock upon conversion of previously issued convertible notes in aggregate value of \$235,000

Exercise of Warrants

From April 1, 2020 up to June 26, 2020, the Company issued 1,045,000 shares of common stock upon the exercise of previously issued warrants for aggregate cash proceeds of \$52,000

Cares Act Funding

In June 2020, the Company ("Borrower") entered into an unsecured promissory note with Cadence Bank ("Lender") in the amount of \$151,200 ("Note"). The Note is payable in 53 monthly consecutive principal and interest payments of \$2,584.57 each, beginning January 2, 2021, with interest calculated on the unpaid principal balances using an interest rate of 1.000% per annum based on a year of 360 days. This estimated final payment is based on the assumption that all payments will be made exactly as scheduled; the actual final payment will be for all principal and accrued interest not yet paid, together with any other unpaid amounts under this Note.

The Lender made this loan pursuant to the Paycheck Protection Program (the "PPP") created by Section 1102 of the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") and governed by the CARES Act, section 7(a)(36) of the Small Business Act, any rules or guidance that has been issued by the Small Business Administration implementing the PPP, or any other applicable Loan Program Requirements, as defined in 13 CFR 120.10, as amended from time to time (collectively "PPP Loan Program Requirements"). Notwithstanding anything to the contrary herein, Borrower (a) agrees that this Promissory Note shall be interpreted and construed to be consistent with the PPP Loan Program Requirements and (b) authorizes the Lender to unilaterally amend any provision to the Promissory Note to the extent required to comply with the PPP Loan Program Requirements.

Borrower may apply to Lender for forgiveness of the amount due under terms of the Note. A copy of the Note is attached as Exhibit 10.1.

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

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

This discussion contains forward-looking statements that involve risks and uncertainties. Such statements, which include statements concerning future revenue sources and concentration, selling, general and administrative expenses, research and development expenses, capital resources, additional financings and additional losses, are subject to risks and uncertainties, including, but not limited to, those discussed elsewhere in this Form 10-Q, and in the "Risk Factors" 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 March 31, 2020, 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 seeks to commercialize 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.

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 may 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 updates, fact sheet, logos and media articles are available at our corporate website, www.qsenergy.com.

As previously reported in our Form 10-K filed with the SEC on March 30, 2020, QS Energy's AOT technology has been tested in a variety of configurations at smallscale in the laboratory and at full-scale in the field under commercial operating conditions, including tests performed U.S. Department of Energy, the PetroChina Pipeline R&D Center, and ATS RheoSystems, a division of CANNONTM. The Company's first two full-scale midstream pipeline installations were on TransCanada's Keystone pipeline in 2014 and a pipeline operated by Kinder Morgan Crude & Condensate, LLC in 2015. Tests performed at these two facilities were limited due primarily to technical issues with the AOT equipment. Although tests at these facilities provided limited sets of data, the equipment did not operate properly, and no conclusions could be reached regarding the efficacy or commercial viability of the AOT technology. Also, in 2014, the Company began development of a product based on an electrical heat system which reduces oil viscosity through a process known as joule heat ("Joule Heat"). In December 2015, we suspended Joule Heat development activities to focus Company resources on finalizing commercial development of the AOT. For more information regarding prior history, development and testing of the AOT technology, and specifics regarding these earlier tests and technical issues experience, please refer to our Form 10-K filed with the SEC on March 30, 2020.

In July 2017, the Company filed for trademark protection for the word "eDiluent" in advance of rolling out a 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". Subject to successful testing of our AOT technology and the availability of sufficient operating capital, 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.



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 would install and operate our AOT equipment on a crude oil pipeline located in the Southern United States. We believe the selected project site could be ideal for demonstration purposes, delivering heavy crudes which, based on samples tested at Temple University, and, subject to the discussion below, could 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 upgrades, 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 determined the primary power supply began to operate erratically and had to be taken offline. Subsequent inspection determined the primary power supply began to operate erratically and had to be taken offline.

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 power supply 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 reliability 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 had initiated parallel tasks in advance of testing of: i) installation of the repaired power supply and performance of 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 a modified AOT grid pack assembly reconfigured and generally optimized based on the latest laboratory and in-field test results.

When the repaired power supply was installed in August 2019, the system operated as expected, and limited testing was performed. 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.

The new high capacity power supply and modified grid pack were installed in December 2019. However, prior to flooding the system with crude oil, early-phase startup testing indicated an electrical short circuit. Subsequent inspection revealed damage to the internal grid pack which likely occurred during installation or during the startup testing cycle. The grid pack was shipped offsite for repairs with reinstallation scheduled for January 2020.

The AOT demonstration project continued to experience setbacks during the first quarter of 2020. After repairing and re-installing the modified grid pack, the system shut down again during commissioning presenting with error conditions similar to the December 2019 failure. At that time, based on external inspections and on-site testing, our engineers suspected the grid pack had again been damaged during re-installation and that such suspected damage was the most likely cause of the electrical short circuit. It was determined at that time the best course of action would be to remove the modified grid pack and re-install the original grid pack which had previously been installed multiple times without sustaining damage, and perform a detailed inspection of the modified grid pack in an effort to determine the cause of the electrical short circuit.

Executing this plan, our team removed the modified grid pack and re-installed the original grid pack assembly in January 2020. After removal, our engineers performed a detailed inspection of the modified grid pack. Inconsistent with expectations, no damage to the modified grid pack was found during this inspection, leaving the cause of the electrical short circuit undiagnosed.

In January and February 2020, our engineers tested and attempted to operate the AOT under a variety of conditions. In these tests, the system could be run at high voltage under static "shut-in" conditions; however, the system continued to shut down due to an electrical short circuit when operated under pressure. In simple terms, this means the system could be flooded with crude oil and powered up in excess of 10,000 volts when the system was shut-in by closing the intake and outtake valves which isolates the system from the pipeline's operating pressure. However, once the valves were opened and the system was subjected to the pipeline's operating pressure, the system developed an electrical short circuit and shut down.

As the presence of high pressure appeared to trigger the short circuit, our engineers believe it is unlikely the fault was in the grid pack assembly as this component was fully submerged in crude oil and would generally subjected to equal pressure on all components. The electrical short was more likely developing in the electrical connection assembly built into the blind flange at the top of the pressure vessel, which would be subjected to high pressure under normal operating conditions. Unfortunately, this electrical connection assembly could not be inspected without destroying the assembly itself. Instead, our engineers developed a plan to rebuild the blind flange and electrical connection assembly and modify the design to better isolate and insulate all electrical pathways, connections, and components.

While the blind flange assembly was being remanufactured, we took the opportunity to implement a number of relatively minor modifications to other system configurations which had been planned for future units based on results of our engineering team's reliability engineering work over the past two years. These modifications were designed to improve the reliability of internal electrical connections, increase the structural support of the internal grid pack, and maintain higher quality control over internal component positioning and alignment during vertical installation.

As of March 31, 2020, we were in the process of finalizing the timelines and budget for this plan based on vendor backlog for each of the tasks. Based on progress to date, reinstallation and commissioning of the modified equipment should be completed in June 2020. Subject to successful commissioning of the equipment, testing is scheduled to resume by the end of June 2020, or shortly thereafter.

For information regarding developments at the AOT demonstration test site subsequent to the March 31, 2020 reporting date of this Form 10-Q, see Item 5, below.

The Company's ability to continue operations at the demonstration site is dependent upon continued support of pipeline management and our ability to fund continued operations. We can provide no assurances pipeline management will continue to support ongoing work at the demonstration site, or that our plan to rebuild and test the electrical connection assembly will be successful. Because of our inability to fully diagnose the cause of our current electrical problems, we can provide no assurances that we will not face other operational issues after completing a full diagnosis and evaluation of our technology.

Assuming the corrective actions discussed above are achieved, our plans moving forward are centered on achieving commercial adoption of our AOT device. Assuming successful operations, we believe the demonstration AOT project should provide data requested by prospective customers such as real-time changes in pipeline pressure drop reduction and increases in pipeline operating flowrates. All collected data at the AOT demonstration site 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 possible sales in late 2020 or 2021.

QS Energy is working to maintain normal operations during the current COVID-19 pandemic under social distancing and shelter-in-place guidelines as recommended or required by the CDC, federal, state and county government agencies. Over the past few years, the Company moved much of its operations to the cloud. Our employees can perform most vital functions remotely. Currently, most day-to-day operations have been minimally impacted by COVID-19.

It is unclear, however, what impact COVID-19 may have on our supply chain, or on our ability to operate on-site at the demonstration project. As of the date of this report, the Company has experienced delays and some cost overruns due to COVID-19 impacts on our supply chain. We have not been made aware of any COVID-19 restrictions at the demonstration site that would impact our ability to restart our demonstration testing.

COVID-19 has had a significant negative financial impact across a wide spectrum of industries, both in terms of operations and access to operating capital. The Company's ability to continue operations is, in part, dependent on our access to funding. A published by the National Association of Manufacturers in March 2020 reports that due to COVID-19, 35% of manufacturers surveyed anticipate supply chain disruptions, 53% anticipate changes to operations, and 78% anticipate a negative financial impact. With these facts in mind, no assurances can be made that COVID-19 will not materially affect our supply chain, will not negatively affect access to the demonstration site, restrict operations at the demonstration site, or negatively impact our ability to fund continued operations.

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 2020, and beyond, to fund work at the demonstration site, our sales and marketing efforts, continuing research and development, and certain other expenses, until we are able to achieve a revenue base. We can provide no assurances that additional capital will be available to us, or if it is, that such additional capital will be offered at acceptable terms.

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

Results of Operations for Three months ended March 31, 2020 and 2019

	2020	Ma	nonths ended arch 31, 2019	Change
Revenues	\$ -	\$	-	\$ -
Costs and Expenses				
Operating expenses	532,000		478,000	54,000
Research and development expenses	70,000		151,000	(81,000)
Loss before other income (expense)	 (602,000)		(629,000)	27,000
Other income (expense)				
Interest and financing expense	(164,000)		(1,653,000)	1,489,000
Net Loss	\$ (766,000)	\$	(2,282,000)	\$ 1,516,000

Operating expenses were \$532,000 for the three-month period ended March 31, 2020, compared to \$478,000 for the three-month period ended March 31, 2019, an increase of \$54,000. This is due to increases in non-cash expenses of \$23,000, and an increase in cash expenses of \$31,000. Specifically, the decrease in non-cash expenses are attributable to increases in warrants issued as compensation for services of \$7,000, and stock compensation expense attributable to options granted to employees and directors of \$16,000. The increase in cash expense is attributable increases in consulting fees of \$42,000, insurance of \$10,000, legal and accounting of \$25,000, public and investor relations of \$9,000, rent and utilities of \$11,000, and travel expenses of \$11,000, offset by decreases in mail and freight of \$6,000, office expenses of \$10,000, salaries and benefits of \$60,000, and other expenses of \$1,000.

Research and development expenses were \$70,000 for the three-month period ended March 31, 2020, compared to \$151,000 for the three-month period ended March 31, 2019, a decrease of \$81,000. This decrease is attributable a decrease in prototype product development costs of \$81,000.

Other income and expense were 164,000 expense for the three-month period ended March 31, 2020, compared to 1,653,000 expense for the three-month period ended March 31, 2019, a net decrease in other expenses of 1,489,000. This increase is attributable to an increase in non-cash other expenses of 1,489,000. The increase in non-cash other expenses is due to increase in expense attributable to interest, beneficial conversion factors and warrants associated with convertible notes issued in the amount of 1,480,000, and other non-cash interest of 9,000.

The Company had a net loss of \$766,000, or \$0.00 per share, for the three-month period ended March 31, 2020, compared to a net loss of \$2,282,000, or \$0.01 per share, for the three-month period ended March 31, 2019.

Liquidity and Capital Resources

<u>General</u>

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 \$2,599,000 as of March 31, 2020. Our negative operating cash flow for the periods ended March 31, 2020 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 \$766,000 and a negative cash flow from operations of \$301,000 for the three-month period ended March 31, 2020. 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, 2020 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 March 31, 2020, we received cash totaling \$96,000 from issuance of our convertible notes payable and exercise of options and warrants to purchase common stock and used cash in operations of \$301,000. At March 31, 2020, we had cash on hand in the amount of \$274,000. 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 2020 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, Part I, Item 1, 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 2 of the Notes to the 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 expenses during the reporting period. Certain significant estimates were made in connection with preparing our consolidated financial statements as described in Note 2 to Notes to 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 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 three-months ended March 31, 2020, the Company incurred a net loss of \$766,000, used cash in operations of \$301,000 and had a stockholders' deficit of \$2,599,000 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 March 31, 2020, the Company had cash on hand in the amount of \$274,000. Management estimates that the current funds on hand will be sufficient to continue operations through July 2020. 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 2020 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 Polices

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 March 31, 2020, 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 March 31, 2020, 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 threemonth period ended March 31, 2020 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, 2019, which we filed with the SEC on March 30, 2020, except risks associated with the COVID-19 pandemic. See Item 2, Overview section above, for a discussion related to COVID-19 risk factors.

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

Issuances

In private offerings exempt from registration, during the three months ended March 31, 2020, the Company issued 3,645,673 shares of its common stock upon the conversion of \$219,000 in convertible notes at \$0.035 per share. In connection with the issuances of the foregoing securities, the Company relied on the exemption 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

The Company provides regular updates on its website in a section thereunder labeled "Recent Updates" at https://qsenergy.com/updates. A copy of website updates for the period of January 1 through June 18 is attached hereto as Exhibit 10.3.

Item 6. Exhibits

Exhibit No.	Description
10.1	Cadence Bank Promissory Note dated June 18, 2020
10.2	Spring 2020 Note Offering
10.3	<u>OS Energy Website Updates</u>
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: June 26, 2020

By:

/s/ Michael McMullen Michael McMullen Chief Financial Officer



BANK

PROMISSORY NOTE

	ncipal ,200.00	Loan Date 06-18-2020	Maturity 06-18-2025	Loan No <redacted></redacted>	Call / Coll OP	Account ***	Officer EMG	Initials
	References in			nly and do not limit the ap ng "***" has been omitted			n or item.	
Borrower: QS ENERGY, INC.2 6-400 Kuykendahl Rd #C180-313 Tomball, TX 77375-2882			Lender:	CADENCE B SBA Middle (Duluth Branc 1970 Satellite Duluth, GA 3	Georgia h Blvd			

Principal Amount: \$151,200.00

Date of Note: June 18, 2020

PROMISE TO PAY. QS ENERGY, INC. ("Borrower") promises to pay to CADENCE BANK, N.A. ("Lender"), or order, in lawful money of the United States of America, the principal amount of One Hundred Fifty-one Thousand Two Hundred & 00/100 Dollars (\$151,200.00), together with interest on the unpaid principal balance from June 18, 2020, until paid in full.

PAYMENT. Borrower will pay this loan in accordance with the following payment schedule, which calculates interest on the unpaid principal balances as described in the "INTEREST CALCULATION METHOD" paragraph using the interest rates described in this paragraph: 53 monthly consecutive principal and interest payments of \$2,584.57 each, beginning January 2, 2021, with interest calculated on the unpaid principal balances using an interest rate of 1.000% per annum based on a year of 360 days; and one principal and interest payment of \$18,775.37 on June 18, 2025, with interest calculated on the unpaid principal balances using an interest rate of 1.000% per annum based on a year of 360 days. This estimated final payment is based on the assumption that all payments will be made exactly as scheduled; the actual final payment will be for all principal and accrued interest not yet paid, together with any other unpaid amounts under this Note. Unless otherwise agreed or required by applicable law, payments will be applied first to any accrued unpaid interest; then to principal; and then to any late charges. Borrower will pay Lender at Lender's address shown above or at such other place as Lender may designate in writing.

INTEREST CALCULATION METHOD. Interest on this Note is computed on a 30/360 simple interest basis; that is, with the exception of odd days before the first full payment cycle, monthly interest is calculated by applying the ratio of the interest rate over a year of 360 days, multiplied by the outstanding principal balance, multiplied by a month of 30 days. Interest for the odd days before the first full month is calculated on the basis of the actual days and a 360-day year. All interest payable under this Note is computed using this method.

PREPAYMENT. Borrower may pay without penalty all or a portion of the amount owed earlier than it is due. Early payments will not, unless agreed to by Lender in writing, relieve Borrower of Borrower's obligation to continue to make payments under the payment schedule. Rather, early payments will reduce the principal balance due and may result in Borrower's making fewer payments. Borrower agrees not to send Lender payments marked "paid in full", "without recourse", or similar language. If Borrower sends such a payment, Lender may accept it without losing any of Lender's rights under this Note, and Borrower will remain obligated to pay any further amount owed to Lender. All written communications concerning disputed amounts, including any check or other payment instrument that indicates that the payment constitutes "payment in full" of the amount owed or that is tendered with other conditions or limitations or as full satisfaction of a disputed amount must be mailed or delivered to: CADENCE BANK, N.A., 3500 Colonnade Parkway, Suite 600 Birmingham, AL 35243.

LATE CHARGE. If a payment is 15 days or more late, Borrower will be charged 5.000% of the unpaid portion of the regularly scheduled payment, regardless of any partial payments Lender has received.

Loan No: 22159438

INTEREST AFTER DEFAULT. Upon default, at Lender's option, and if permitted by applicable law, Lender may add any unpaid accrued interest to principal and such sum will bear interest therefrom until paid at the rate provided in this Note. Upon default, the total sum due under this Note will continue to accrue interest at the interest rate under this Note, with the final interest rate described in this Note applying after maturity, or after maturity would have occurred had there been no default. However, in no event will the interest rate exceed the maximum interest rate limitations under applicable law.

DEFAULT. Each of the following shall constitute an event of default ("Event of Default") under this Note: Payment Default. Borrower fails to make any payment when due under this Note.

Other Defaults. Borrower fails to comply with or to perform any other term, obligation, covenant or condition contained in this Note or in any of the related documents or to comply with or to perform any term, obligation, covenant or condition contained in any other agreement between Lender and Borrower.

Default in Favor of Third Parties. Borrower or any Grantor defaults under any loan, extension of credit, security agreement, purchase or sales agreement, or any other agreement, in favor of any other creditor or person that may materially affect any of Borrower's property or Borrower's ability to repay this Note or perform Borrower's obligations under this Note or any of the related documents.

False Statements. Any warranty, representation or statement made or furnished to Lender by Borrower or on Borrower's behalf under this Note or the related documents is false or misleading in any material respect, either now or at the time made or furnished or becomes false or misleading at any time thereafter.

Insolvency. The dissolution or termination of Borrower's existence as a going business, the insolvency of Borrower, the appointment of a receiver for any part of Borrower's property, any assignment for the benefit of creditors, any type of creditor workout, or the commencement of any proceeding under any bankruptcy or insolvency laws by or against Borrower.

Creditor or Forfeiture Proceedings. Commencement of foreclosure or forfeiture proceedings, whether by judicial proceeding, self-help, repossession or any other method, by any creditor of Borrower or by any governmental agency against any collateral securing the loan. This includes a garnishment of any of Borrower's accounts, including deposit accounts, with Lender. However, this Event of Default shall not apply if there is a good faith dispute by Borrower as to the validity or reasonableness of the claim which is the basis of the creditor or forfeiture proceeding and if Borrower gives Lender written notice of the creditor or forfeiture proceeding and deposits with Lender monies or a surety bond for the creditor or forfeiture proceeding, in an amount determined by Lender, in its sole discretion, as being an adequate reserve or bond for the dispute.

Events Affecting Guarantor. Any of the preceding events occurs with respect to any guarantor, endorser, surety, or accommodation party of any of the indebtedness or any guarantor, endorser, surety, or accommodation party dies or becomes incompetent, or revokes or disputes the validity of, or liability under, any guaranty of the indebtedness evidenced by this Note.

Change In Ownership. Any change in ownership of twenty-five percent (25%) or more of the common stock of Borrower.

Adverse Change. A material adverse change occurs in Borrower's financial condition, or Lender believes the prospect of payment or performance of this Note is impaired.

Insecurity. Lender in good faith believes itself insecure.

SBA. When SBA is the holder, this Note will be interpreted and enforced under Federal law, including SBA regulations. Lender or SBA may use state or local procedures for filing papers, recording documents, giving notice, foreclosing liens, and other purposes. By using such procedures, SBA does not waive any Federal immunity from state or local control, penalty, tax, or liability. As to this Note, Borrower may not claim or assert against SBA any local or state law to deny any obligation, defeat any claim of SBA, or preempt Federal law.

PAYCHECK PROTECTION PROGRAM. Lender is making this loan pursuant to the Paycheck Protection Program (the "PPP") created by Section 1102 of the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") and governed by the CARES Act, section 7(a)(36) of the Small Business Act, any rules or guidance that has been issued by the Small Business Administration implementing the PPP, or any other applicable Loan Program Requirements, as defined in 13 CFR 120.10, as amended from time to time (collectively "PPP Loan Program Requirements"). Notwithstanding anything to the contrary herein, Borrower (a) agrees that this Promissory Note shall be interpreted and construed to be consistent with the PPP Loan Program Requirements and (b) authorizes the Lender to unilaterally amend any provision to the Promissory Note to the extent required to comply with the PPP Loan Program Requirements.

NOTE FORGIVENESS. Borrower may apply to Lender for forgiveness of the amount due on this Note in an amount equal to the sum of the following costs incurred by Borrower during the 8-week period beginning on the date of first disbursement of this Note:

a.Payroll costs

b.Any payment of interest on a covered mortgage obligation (which shall not include any prepayment of or principal on a covered mortgage obligation)

c.Any payment on a covered rent obligation

d.Any covered utility payment

The amount of forgiveness shall be calculated (and may be reduced) in accordance with the requirements of the PPP, including the provisions of Section 1106 of the CARES Act. Not more than 25% of the amount forgiven can be attributed to non-payroll costs. If Borrower has received an Economic Injury Disaster Loan ("EIDL") advance, then the amount of the advance shall be subtracted from the loan forgiveness amount.

BORROWER'S CERTIFICATION. In connection with the application submitted to Lender for a loan under the PPP, Borrower hereby certifies to the Lender the following: a. The "Average Monthly Payroll" that Borrower reported in the Application was calculated in accordance with the instructions for the PPP Application Form (SBA From 2483).

b. Borrower had and has the requisite corporate power and authority to execute and deliver the Application and any related documents, and to perform Borrower's obligations thereunder.

c. Borrower understands that this Borrower Certification is being delivered to Lender in addition to the representations, authorizations and certifications Borrower made in the Application. Borrower further understands that the Lender will rely on the statements contained in this Borrower Certification and the Application for purposes of making a loan to Borrower under the Program.

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d. The statements contained in this Borrower Certification and the representations, authorizations and certifications in the Application are true and correct in all respects. e. Borrower agrees to indemnify and hold harmless Lender, its officers, directors, employees, agents and controlling persons thereof, past, present or future, from and against any and all liabilities, losses, costs, damages and expenses, including costs and reasonable attorneys' fees arising out of or related to any loan made by Lender to Borrower under the PPP, including any misrepresentation, omission, or inaccuracy contained in this Borrower's Certification, the Application or any supporting documentation provided by Borrower in connection with obtaining a loan under the PPP.

LENDER'S RIGHTS. Upon default, Lender may declare the entire unpaid principal balance under this Note and all accrued unpaid interest immediately due, and then Borrower will pay that amount.

ATTORNEYS' FEES; EXPENSES. Lender may hire or pay someone else to help collect this Note if Borrower does not pay. Borrower will pay Lender that amount. This includes, subject to any limits under applicable law, Lender's costs of collection, including court costs and fifteen percent (15%) of the principal plus accrued interest as attorneys' fees, if any sums owing under this Note are collected by or through an attorney at law, whether or not there is a lawsuit, and legal expenses for bankruptcy proceedings (including efforts to modify or vacate any automatic stay or injunction), and appeals. If not prohibited by applicable law, Borrower also will pay any court costs, in addition to all other sums provided by law.

JURY WAIVER. Lender and Borrower hereby waive the right to any jury trial in any action, proceeding, or counterclaim brought by either Lender or Borrower against the other.

GOVERNING LAW. This Note will be governed by federal law applicable to Lender and, to the extent not preempted by federal law, the laws of the State of Georgia without regard to its conflicts of law provisions. This Note has been accepted by Lender in the State of Georgia.

CHOICE OF VENUE. If there is a lawsuit, Borrower agrees upon Lender's request to submit to the jurisdiction of the courts of Gwinnett County, State of Georgia.

COLLATERAL. This loan is unsecured.

SUCCESSOR INTERESTS. The terms of this Note shall be binding upon Borrower, and upon Borrower's heirs, personal representatives, successors and assigns, and shall inure to the benefit of Lender and its successors and assigns.

NOTIFY US OF INACCURATE INFORMATION WE REPORT TO CONSUMER REPORTING AGENCIES. Borrower may notify Lender if Lender reports any inaccurate information about Borrower's account(s) to a consumer reporting agency. Borrower's written notice describing the specific inaccuracy(ies) should be sent to Lender at the following address: CADENCE BANK, N.A. 3500 Colonnade Parkway, Suite 600 Birmingham, AL 35243.

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GENERAL PROVISIONS. If any part of this Note cannot be enforced, this fact will not affect the rest of the Note. Lender may delay or forgo enforcing any of its rights or remedies under this Note without losing them. Borrower and any other person who signs, guarantees or endorses this Note, to the extent allowed by law, waive presentment, demand for payment, and notice of dishonor. Upon any change in the terms of this Note, and unless otherwise expressly stated in writing, no party who signs this Note, whether as maker, guarantor, accommodation maker or endorser, shall be released from liability. All such parties waive any right to require Lender to take action against any other party who signs this Note as provided in O.C.G.A. Section 10-7-24 and agree that Lender may renew or extend (repeatedly and for any length of time) this loan or release any party or guarantor or collateral; or impair, fail to realize upon or perfect Lender's security interest in the collateral; and take any other action deemed necessary by Lender without the consent of or notice to anyone. All such parties also agree that Lender may modify this loan without the consent of or notice to anyone other than the party with whom the modification is made. The obligations under this Note are joint and several.

THIS NOTE IS GIVEN UNDER SEAL AND IT IS INTENDED THAT THIS NOTE IS AND SHALL CONSTITUTE AND HAVE THE EFFECT OF A SEALED INSTRUMENT ACCORDING TO LAW.

BORROWER:

QS ENERGY, INC.

By: <u>/s/ Michael McMullen</u> Michael McMullen, Chief Financial Officer of QS ENERGY, INC.

SECURITIES PURCHASE AGREEMENT Convertible Promissory Notes and Stock Purchase Warrants

THIS SECURITIES PURCHASE AGREEMENT (this "Agreement") is made and entered into as of ______, 2020 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 \$0.035 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 \$0.035 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. <u>Purchase of the Notes and Warrants.</u> 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. <u>Purchaser's Representations, Warranties and Covenants.</u> 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.

(e) 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, on 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 transfered 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 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.

(1) 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 March 27, 2020 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 March 27, 2020, 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.

(1) 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.

, 2020 ("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 \$0.035 (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 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. ____

QS ENERGY, INC. WARRANT TO PURCHASE COMMON STOCK

. 2020

VOID AFTER 5:00 P.M. (Pacific Time) ON _____, 2021

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. <u>Saturdays</u>, <u>Sundays</u>, <u>Holidays</u>, 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) <u>Merger, etc.</u> 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) <u>Reclassification, etc.</u> 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 subtanding immediately prior to such subtanding immediately prior to such subtanding immediately after such event bears to the total number of Shares outstanding immediately after such event bears to the total number of Shares outstanding immediately prior to such such as the total number of Shares outstanding immediately after such event bears to the total number of Shares outstanding immediately prior to such event.

(c) <u>Cash Distributions.</u> 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) <u>Restrictions on Transfer of Shares</u>. 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, 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) <u>Restrictive Legends</u>. 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) <u>Governing Law.</u> 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) <u>Restrictions.</u> 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) <u>Waivers Strictly Construed.</u> 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'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.



QS ENERGY WEBSITE UPDATES

SOURCE: Recent Updates page located at https://www.qsenergy.com/updates

LATEST UPDATES AND INFORMATION

Cautionary Statement: Some of the statements on this web page may constitute forward-looking statements under federal securities laws. Please visit the following link for our complete cautionary forward-looking statement: https://www.qsenergy.com/site-info/disclaimer. You should read all updates and press releases in the context of our SEC filings, including our Form 10-K filing of March 30, 2020, which can be accessed on our website and at https://ir.qsenergy.com/annual-reports. All updates on this web page are intended as general summaries, current as-of the referenced date. COVID-19 has both directly and indirectly impacted our supply chain and our ability to obtain working capital. It remains unclear what continued impact COVID-19 may have on our ability to test at the demonstration project site. The Company will need to raise additional capital to fund continued operations and testing at the demonstration site. We can provide no assurances that such funding will be available to us, or that any such funding would be at acceptable terms. For full context, we urge you to read all referenced updates and press releases. Nothing contained herein constitutes an offer to sell, nor a solicitation to buy, our securities.

June 18, 2020: AOT Demonstration Project Brief Update

Please read this and all website updates in context with the Cautionary Statement above.

Modified AOT Installation of the modified AOT grid pack and blind flange assembly has commenced. As noted in yesterday's update, the equipment arrived at the demonstration site on Tuesday, June 16th. Our pipeline partner installed the grid pack and blind flange assembly this afternoon, June 18th, overseen by Christopher Gallagher and Shannon Rasmussen of QS Energy. During the assembly and pre-installation procedure, our engineers conducted a series of high voltage impedance tests to verify both electrical continuity and the impedance of the assembled grid pack and blind flange. These tests showed that the system continues to test at high levels of impedance indicating the new insulating materials are performing as expected, consistent with earlier tests on the newly modified design described in the June 17, 2020 update.

Early next week, our pipeline partner is scheduled to complete the electrical hookup and install additional SCADA (system control and data acquisition) equipment at the site. Based on our most recent schedule, we plan to complete installation, start-up testing and commissioning next week (see the June 17, 2020 update for a description the startup and commissioning test cycle). Assuming successful commissioning, demonstration AOT test operations should begin by the end of next week, or shortly thereafter.

We look forward to providing you with status updates in near future.

June 17, 2020: AOT Demonstration Project Update

Please read this and all website updates in context with the Cautionary Statement above.

After successfully working through a series of supply chain disruptions caused by COVID-19, our vendors and our engineering team worked overtime to complete repairs and modifications to our AOT demonstration unit with minimal impact on our schedule. Modifications to the AOT grid pack and blind flange assembly were completed over the weekend. The equipment was carefully packed and shipped from Houston on Monday and arrived at the demonstration site yesterday, Tuesday June 16th. Our engineers will be on site this week to oversee final preparation and installation of the equipment which, barring weather or other unforeseen delays, should be completed by the end of the week.

Prior to shipping the equipment, our engineers conducted high voltage impedance testing on the grid pack, the blind flange, and the assembly to verify that the modified design and new insulating materials are performing as expected. All tests yielded good results with higher insulation values recorded than those measured in previous tests. We believe this is the result of the reliability engineering changes that were implemented during the rebuild process.

Tests performed prior to shipment were performed under dry (open-air) conditions and at ambient pressure. Additional tests will be performed under dry (no crude oil), flooded (filled with crude oil), closed-in (not under pressure), and open (operating pressure) conditions during installation and commissioning to further assess design modifications prior to testing under commercial operating conditions. Assuming the system passes all tests performed during the start-up and commissioning process, demonstration test operations may begin as early as next week.

Our engineers have made several modifications to the design based on engineering efforts to improve quality control, electrical insulation, and overall system performance and reliability. Many of these modifications were designed to mitigate the electrical short experienced in prior tests as described in previous updates. Based on best information and analysis to date, we believe the modifications to the grid pack and blind flange assembly should improve the insulative properties and may resolve the short circuit issue. However, no assurances can be made that these design changes will resolve the electrical short issue, that the demonstration project will perform as expected, or that additional design modifications will not be required.

As noted in this and previous updates, COVID-19 has both directly and indirectly impacted our supply chain and our ability to obtain working capital. It remains unclear what continued impact COVID-19 may have on our ability to test at the demonstration project site. Based on our limited current capital resources, the Company will need to raise additional capital to fund continued operations and testing at the demonstration site. We can provide no assurances that such funding will be available to us, or that any such funding would be at acceptable terms.

With these cautions in mind, we are excited to be back out in the field. Our engineers have done amazing work under unique and challenging conditions to modify and prepare our equipment for this critical test cycle. We will continue to keep you posted on our progress with updates on this website.

May 22, 2020: Shareholder Update: Don Dickson, Interim CEO

Please read this and all website updates in context with the Cautionary Statement above.

AOT Demonstration Project InstallationDear Shareholders,

Since taking on the role of interim CEO on April 15th I have had the chance to roll up my sleeves and work with our exceptionally talented and dedicated management and engineering team. They are focused on taking decisive actions to transform the business, continuing to innovate and improve our product in new and diverse ways, and unlocking future growth opportunities. Our supply chain is working efficiently and after adjustments largely due to COVID-19 restrictions is on target to deliver upgraded AOT equipment to the demonstration site in early June.

Over the past few weeks, I have developed a much deeper understanding of our AOT technology, the many challenges our engineers have faced over its development cycle, and design changes that are being implemented in our latest configuration. You likely know from reading prior reports that our technology has had multiple issues with what appear to be short circuits developing when treating the crude oil transported through the pipeline at the demonstration site. In our most recent test, a short circuit developed when operated at pressure under typical commercial operating conditions. Our engineers traced the most likely cause of this short to the blind flange at the top of the AOT unit and are now in the final stage of implementing changes to this component designed to mitigate the effects of pipeline operating pressure. We have also taken this opportunity to implement relatively minor changes to the internal grid pack designed to improve system reliability and quality control.

COVID-19 and other unforeseen circumstances could affect our schedule, but with only one week remaining in the month of May, I am confident in our timeline to restart testing in June and believe we are taking the right steps to move our business and testing forward.

I wish you all a fun, safe and healthy Memorial Day weekend, and look forward to updating you in June with activity at the demonstration site. As always, I recommend you read this Shareholder Update in context with previous updates on this website (qsenergy.com/updates) and SEC filings including our Form 10-K filed on March 31, 2020.

Best Regards, Don Dickson CEO, QS Energy

April 22, 2020: Demonstration project and COVID-19 update Please read this and all website updates in context with the Cautionary Statement above.

Greetings from QS Energy. We hope you all have been able to stay home, stay safe and stay healthy.

Our demonstration project continues to move forward but testing at the site has been delayed largely due to effects of COVID-19 restrictions. Although our operations have not been directly impacted, one of our critical-path suppliers who is working on modifications to AOT demonstration project equipment experienced a slowdown as they reconfigured operations to accommodate remote engineering. Now that their operations have stabilized, they have finalized engineering work required to implement our team's design modifications to the blind flange and electrical interconnect assembly as described in our March 20, 2020 website update and have provided us with a final production schedule. Based on this new schedule we are now targeting delivery of components in early June and hope to restart testing at the demonstration site before the end of June. This delay, brought on in part by COVID-19, is disappointing but we are excited to get back into the field and look forward to restarting AOT test operations.

COVID-19 continues to have sweeping impacts on the oil and gas markets. With supplies up and international tensions driving prices to all-time lows, the futures spot market experienced negative pricing for West Texas Intermediate crude (WTI; a shale deposit light crude) yesterday the first time in its history, leading to widespread speculation of financial turmoil in the oil and gas sector. With prices down and demand for storage exceeding capacity, light crude wells are being shut-in throughout the oil patch.

Heavy crudes, which represent QS Energy's target market, are also experiencing historically low prices. It is interesting to note, however, the role transportation costs play in heavy crude pricing and profitability. As reported in a March 29, 2020 article by Robert Tuttle posted on OilWorld.com titled "Some Canadian crude costs more to ship than buy," Western Canadian Select crude (WCS) has been trading at barrel prices "cheaper than a Starbucks venti-sized pumpkin spice latte." At prices this low, the cost of transportation becomes a principal factor in profitability. A primary driver in the cost of transportation is the fact that heavy crude must be blended with condensate to reduce viscosity to the point the heavy crude can flow through a pipeline. This goes to the core value of our AOT technology. Our goal is to decrease transportation costs and increase producer and operator profit margins by reducing dependence on condensates/diluents and increasing effective pipeline capacity and flowrates.

As noted in our previous update, it remains unclear what continued impact COVID-19 may have on our supply chain, or on our ability to test on-site at the demonstration project, or on our ability to obtain additional working capital, the lack of which would adversely impact our ability to continue our demonstration project testing activities. That said, we remain confident in our strategy and plans to complete current modifications to the AOT demonstration unit and restart testing at the demonstration site. We will keep you posted on our progress with updates on this website.

April 16, 2020: SEC Form 8-K filed

Please read this and all website updates in context with the Cautionary Statement above.

As reported in our SEC Form 8-K filed today (4/16/2020), Jason Lane voluntarily resigned as CEO of the company for personal reasons, effective April 15, 2020. Also effective April 15, 2020, Gary Buchler has voluntarily resigned from the Company's Board of Directors after three years of service on the Board. Although Mr. Lane has stepped down from day-to-day management of the Company, he will continue to serve as a Chairman of the Company's Board of Directors.

Don Dickson, a member of the Company's Board of Directors, has been appointed interim CEO for a term of 90 days effective April 15, 2020. As a long-time member of the Company's Board and an oil industry executive with years of pipeline operating experience, Mr. Dickson is highly qualified to guide QS Energy through this transition period. Mr. Dickson was appointed to the Company's Board of Directors in August 2013 and currently serves as a member of the Company's Audit Committee. Previously, Mr. Dickson served as Chief Executive Officer / President for Advanced Pipeline Services (APS). APS was established for the purpose of providing a full range of services to the oil and gas industry. Core business areas were in new construction of pipeline and facilities, horizontal directional drilling and pipeline integrity/rehabilitation. APS had operations and offices in both Texas, Eagleford and Permian Basin Fields. Prior to APS, Mr. Dickson worked for Kinder Morgan in their natural gas operations, retiring after twenty-nine years. During his time at Kinder Morgan he served in different engineering capacities including as Director on two major pipeline projects, the 42" (REX) Rockies Mountain Express through the state of Illinois, and the 42" (MEP) Midcontinent Express Pipeline through the state of Louisiana. He also was Director of Operations with Tetra Resources completing various onshore and offshore oil and gas wells and a Senior Engineer with Halliburton Services. After APS Mr. Dickson rejoined Kinder Morgan a second time and is currently working as a consultant and performing inspections in the oil and gas industry for different companies. Mr. Dickson has since retired from Kinder Morgan a second time and is currently working as a consultant and performing inspections in the oil and gas industry for different companies. Mr. Dickson earned his B.S. in Engineering from Oklahoma State University.

We would like to thank Mr. Buchler for his years of service with the Company and are excited to continue working with Mr. Dickson and Mr. Lane in their new executive roles.

March 20, 2020: Demonstration Project and COVID-19 Update

Please read this and all website updates in context with the Cautionary Statement above.

Progress continues on our efforts to restart testing at the AOT Demonstration Project site. As reported on March 4, 2020, the AOT demonstration equipment is currently nonoperational due to an electrical short which appears to develop when the AOT is powered up under normal pipeline operating conditions. Our engineers believe the electrical short is most likely developing in the electrical connection assembly built into the blind flange at the top of the pressure vessel, which is subject to pipeline pressure under commercial operations.

Over the past two weeks, our engineers designed modifications to the blind flange, electrical connections and related housing intended to minimize the effects of high pressure and likelihood of internal electrical short circuits. Concurrently, we shipped a blind flange with high voltage assembly from inventory to a shop with specialized equipment used to strip the flange of all electrical insulation materials. Once the stripping process is complete, castings will be made to complete the internal assembly. Our engineers believe this modification may solve the electrical short issue we have experienced in prior tests.

While the blind flange assembly is being remanufactured, we have taken the opportunity to implement a number of relatively minor modifications to system configurations which had been planned for future units based on results of our engineering team's reliability engineering work over the past two years. These modifications are designed to improve the reliability of internal electrical connections, increase the structural support of the internal grid pack, and maintain higher quality control over internal component positioning and alignment during vertical installation.

QS Energy is working to maintain normal operations during the current COVID-19 pandemic under social distancing and shelter-in-place guidelines as recommended or required by the CDC, federal, state and county government agencies. Over the past few years, the Company moved much of its operations to the cloud. Our employees can perform most vital functions remotely. As a result, most day-to-day operations have been minimally impacted by COVID-19.

It is unclear, however, what impact COVID-19 may have on our supply chain, or on our ability to operate on-site at the demonstration project. As of today, no suppliers related to the demonstration project have announced reduced operating capacity or advised us of delays related to COVID-19 restrictions, and we have not been made aware of any COVID-19 restrictions at the demonstration site that would impact our ability to restart our demonstration testing.

COVID-19 has had a significant negative financial impact across a wide spectrum of industries, both in terms of operations and our access to operating capital. As noted in previous updates, the Company's ability to continue operations is, in part, dependent on our access to funding. A recent survey published by the National Association of Manufacturers reports that due to COVID-19, 35% of manufacturers surveyed anticipate supply chain disruptions, 53% anticipate changes to operations, and 78% anticipate a negative financial impact. With these facts in mind, no assurances can be made that COVID-19 will not affect our supply chain, lead to access or operating restrictions at the demonstration site, or impact our ability to fund continued operations.

Despite the potential for deep impacts of COVID-19, and subject to obtaining sufficient working capital, we intend to continue our strategy and plans to complete current modifications to the AOT demonstration unit and restart testing at the demonstration site. We will continue to post updates on the AOT demonstration project, and impacts, if any, due to COVID-19.

March 4, 2020: AOT Demonstration Project Update

Please read this and all website updates in context with the Cautionary Statement above.

Over the past few weeks, we have been working to resolve a continuing electrical issue with our AOT demonstration equipment. Although we have made progress and believe this technical issue can be resolved, the system continues to be non-operational under normal pipeline operating conditions.

As reported in previous updates, the AOT system has experienced shutdowns during the commissioning process. In December 2019, after installing a modified grid pack and new high-capacity power supply, the system shut down presenting with an electrical short which was determined to be due to damage to the system's internal grid pack likely incurred during installation. After repairing and re-installing the modified grid pack in January 2020, the system shut down again during commissioning presenting with error conditions similar to the December 2019 failure. At that time, based on external inspections and on-site testing, our engineers suspected the grid pack had again been damaged during re-installation and that such suspected damage was the most likely cause of the electrical short circuit. As reported in our January 24, 2020 web page update, it was determined at that time the best course of action would be to remove the modified grid pack and re-install the original grid pack which had previously been installed multiple times without sustaining damage, and perform a detailed inspection of the modified grid pack in an effort to determine the cause of the electrical short circuit.

Executing this plan, our team removed the modified grid pack and re-installed the original grid pack assembly in the AOT. After removal, our engineers performed a detailed inspection of the modified grid pack. Inconsistent with our expectations, no damage to the modified grid pack was found during this inspection, leaving the cause of the most recent electrical short circuit undiagnosed.

Over the past few weeks, we have tested and attempted to operate the AOT under a variety of conditions. We have been able to bring the system up to high voltage under static "shut-in" conditions; however, the system continues to shut down due to an electrical short circuit when operated under pressure. In simple terms, this means we can flood the system with crude oil, shut-in the system by closing the intake and outtake valves isolating the system from the pipeline's operating pressure, and power up the system in excess of 10,000 volts. Once the valves are opened and the system is subjected to the pipeline's operating pressure, the system develops an electrical short circuit and shuts down.

As the presence of high pressure appears to trigger the short circuit, it is unlikely the fault is in the grid pack assembly as this component is fully submerged in crude oil and is generally subjected to equal pressure on all components. The electrical short is more likely developing in the electrical connection assembly built into the flange at the top of the pressure vessel, which is subjected to high pressure under normal operating conditions. Unfortunately, this electrical connection assembly cannot be inspected without destroying the assembly itself. Instead, our engineers have developed a plan to replace the installed electrical connection assembly with an assembly from inventory which we plan to rebuild prior to installation.

As part of an ongoing reliability-engineering effort, our engineers had been working on incremental modifications to improve electrical isolation within the electrical connection assembly. These previously developed plans have allowed us to move quickly with vendors and present an expedited plan to the pipeline operator. We are in the process of finalizing the timelines and budget for this plan based on vendor backlog for each of the tasks. Based on current estimates, this process may take approximately six weeks. This schedule may vary depending on vendor backlogs and other factors which may be out of our control.

Our engineers have presented our plan to rebuild and the electrical connection assembly to pipeline management. Pipeline management has expressed frustration and concern over the continued delays and current status of the demonstration project. Last week, our CEO, Jason Lane, met with pipeline management to express our total commitment to this project and discuss plans, schedules and next steps. We heard back from pipeline management this week requesting confirmation of timelines and budget to ensure all parties are clear on plans to move forward.

The Company's ability to continue operations at the demonstration site is dependent upon continued support of pipeline management and our ability to fund continued operations. We can provide no assurances pipeline management will continue to support ongoing work at the demonstration site, or that our plan to rebuild and test the electrical connection assembly will be successful. Because of our inability to fully diagnose the cause of our current electrical problems, we can provide no assurances that we will not face other operational issues after completing a full diagnosis and evaluation of our technology. As disclosed in our SEC filings, we have not yet been able to generate revenue from operations, and Company 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 2020, and beyond, to fund continued work at the demonstration site along with Company operating and capital expenses. We can provide no assurances that additional capital will be available to us, or if it is, that such additional capital will be offered at acceptable terms.

January 24, 2020: AOT Demonstration Project Update

Please read this and all website updates in context with the Cautionary Statement above.

We have had a setback in the recent testing of our AOT demonstration project. As you may recall, re-installation of our modified AOT grid pack (see our December 9, 2019 press release regarding AOT grid pack modifications) was completed the second week of January as reported in our January 9, 2020 web page update below. Due to severe weather forecast at the demonstration site, commissioning was postponed until the following week. On January 16th, during our final commissioning sequence, the equipment presented with an error condition indicating what appears to be an electrical short circuit. After a system review and analysis of data collected during the installation and commissioning process, our engineers have determined the most likely cause of the electrical short circuit is a mechanical failure in the modified AOT grid pack which may have been damaged during the installation and commissioning process. It should be noted that despite the apparent electrical short circuit, tests performed during commissioning indicate the new high-capacity power supply is operating as designed.

Our engineers have prepared a plan to remove, test and visually inspect all components of the modified AOT grid pack. Subject to weather and resource availability (i.e. manpower, crane, etc.), we will use best efforts to remove, test and inspect of the modified AOT grid pack next week. In parallel, we plan to inspect and test the original AOT grid pack (shown in the attached image) which is currently being stored at the demonstration site and should be available for operation subject to inspection and test results.

We believe the best course of action may be to run our next full system test utilizing the original AOT grid pack as this grid pack has been successfully installed without incurring damage and has operated at normal pipeline flow rates under limited test conditions as described in our September 13, 2019 press release. Data collected in these limited tests indicate the original AOT grid pack powered by the new high-capacity power supply could provide significant flow rate improvement.

We will re-assess our demonstration project test plan after completion of the inspection, investigation, and testing procedures described above, but, as you know, we can provide no assurances about the outcome of our investigative and re-assessment efforts. We will continue, as always, to provide progress, plan and schedule updates on this web page.

January 9, 2020: AOT Demonstration Project Update

Please read this and all website updates in context with the Cautionary Statement above.

Reconfiguration and repairs to the AOT grid pack are complete, our engineering team is onsite, weather at the demonstration site is clear and re-installation of the reconfigured/repaired AOT grid pack has begun. Re-installation should be completed this afternoon. Due to extreme weather forecast across the Southern United States over the next few days, final commissioning of the AOT equipment will likely be completed next week. Subject to successful commissioning, AOT demonstration test operations will begin shortly thereafter.

January 3, 2020: AOT Demonstration Project Update

Please read this and all website updates in context with the Cautionary Statement above.

This is a short update on work currently being performed on the AOT demonstration equipment. For full context, please see the December 31, 2019 and December 6, 2019 updates below.

As reported earlier this week, the internal grid pack of the AOT demonstration unit was recently shipped to a local shop for minor reconfiguration changes and repairs. All parts and supplies were delivered to the shop yesterday (1/2/2020). Work was completed this afternoon (1/3/2020) supervised by our engineering team. Quality assurance and system component testing was initiated this afternoon and should be completed early next week. Assuming successful component testing, the AOT grid pack should be ready for re-installation by the middle of next week.

Our engineers will be onsite next week to oversee transportation and re-installation of the AOT grid pack. Subject to weather constraints (work cannot be performed under certain conditions including lightning, high wind or rain), the AOT grid pack is scheduled to be re-installed on Thursday of next week (1/9/2020) with onsite testing to begin shortly thereafter.

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, Don Dickson, 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: June 26, 2020

/s/ Don Dickson Don Dickson Interim 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: June 26, 2020

/s/ Michael McMullen Michael McMullen Chief Financial Officer

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 March 31, 2020 (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: June 26, 2020

Date: June 26, 2020

/s/ Don Dickson Don Dickson Interim Chief Executive Officer

/s/ Michael McMullen Michael McMullen Chief Financial Officer