

# **QS Energy Launches On-Site AOT Benchmarking Program to Accelerate Efficacy Testing of Viscosity Reduction Technology by Pipeline Operators**

Greggory M. Bigger, CEO and Inc.

SANTA BARBARA, CA -- (Marketwired) -- 12/07/16 -- QS Energy, Inc. (the "Company") (OTCQX: QSEP), a developer of integrated technology solutions for the energy industry, Chairman of the Board, QS Energy, today announced that is now making available a portable, reduced-scale AOT (Applied Oil Technology) system for onsite testing of crude oil upon request by producers and

transporters of unrefined petroleum products. Designed to be installed temporarily at customer facilities, the fully functional demonstration AOT unit can perform laboratory-grade analysis to measure the efficacy of the technology in reducing the viscosity of a series of grades and blends of crude oil using QS Energy's patented electrorheological process.

"Following viscosity testing of crude oil samples at Temple University's Department of Physics laboratory, many of our customers request further analysis of their hydrocarbon production at their facilities," stated Greggory M. Bigger, QS Energy Chief Executive Officer and Chairman. "Having the benefit of this AOT demonstration unit enables us to pursue these opportunities efficiently and at reasonable customer cost while greatly accelerating the path toward full-scale AOT installations."

Originally fabricated for a series of in-depth efficacy tests conducted at Southern Research in Alabama, the specially constructed AOT benchmarking unit provides for a variety of testing protocols which simulate the functionality of a full-size AOT system installed on a commercial crude oil pipeline. To ensure maximum accuracy and a detailed analysis of the results, the reduced-scale AOT unit includes pumps, viscometers, thermocouples, and a data acquisition system.

"Our goal is to streamline the process of gathering the necessary engineering parameters and hydraulic analysis data to more efficiently transition the customer from an evaluation phase to a permanent deployment," Mr. Bigger added. "By making this on-site demonstration of our technology's efficacy available to producers and transporters anywhere in the world we can document definitively the potential flow volume gains, operational efficiencies, and cost reduction benefits possible by incorporating AOT into existing pipeline infrastructures."

According to John Valenti, QS Energy's Project Manager, the reduced-scale AOT collects a broad spectrum of data relevant to viscosity reduction, pressure drop reduction, flow volume and other metrics similar to the detailed hydraulic analysis reports currently provided to prospective users of the crude oil pipeline optimization system. Mr. Valenti concurs that having the advantage of an on-site demonstration capability may result in a shortened AOT

adoption time by eliminating the need for a full-scale test installation to establish the effectiveness of the AOT technology.

"For the first time outside of the laboratory we can replicate the efficacy of AOT with a small form factor unit designed for easy transport so our team can demonstrate the potential return on investment of AOT prior to a full deployment of commercial AOT equipment," Mr. Bigger added, "This will also allow us to test a wider range of potential customer's products and help avoid difficulties in shipping dozens of crude oil samples that routinely become delayed due to Customs Service clearance or shipping vendor restrictions."

Developed in partnership with scientists at Temple University in Philadelphia, AOT (Applied Oil Technology) is the energy industry's first crude oil pipeline technology using low-wattage electrical charges to improve flow volume and optimize the performance of midstream pipeline systems. During the past several years QS Energy has conducted testing of samples of crude oil from most of the primary oil production regions of the world under the supervision of Dr. Rongjia Tao, the chair of the Department of Physics at Temple University and a leading researcher in the development of technologies based on the use of electrorheological principles.

For further information about QS Energy, Inc., visit<u>www.QSEnergy.com</u>, read our SEC filings at <a href="https://ir.stockpr.com/qsenergy/all-sec-filings">https://ir.stockpr.com/qsenergy/all-sec-filings</a> and subscribe to Email Alerts at <a href="https://ir.stockpr.com/qsenergy/email-alerts">https://ir.stockpr.com/qsenergy/email-alerts</a> to receive company news and shareholder updates.

#### Safe Harbor Statement:

Some of the statements in this release may constitute forward-looking statements under federal securities laws. Please visit the following link for our complete cautionary forward-looking statement: http://www.gsenergy.com/site-info/disclaimer

## About AOT (Applied Oil Technology)

Developed in partnership with scientists at Temple University in Philadelphia, AOT (Applied Oil Technology) is the energy industry's first crude oil pipeline flow improvement solution using an electrical charge to coalesce microscopic particles native to unrefined oil, thereby reducing viscosity. Over the past four years AOT has been rigorously prepared for commercial use with the collaboration of over 30 engineering teams at 19 independent oil production and transportation entities interested in harnessing its demonstrated efficacy to increase pipeline performance and flow, drive up committed and uncommitted toll rates for pipeline operators, and reduce pipeline operating costs. Although AOT originally attracted the attention of pipeline operators motivated to improving their takeaway capacity during an historic surge in upstream output resulting from enhanced oil recovery techniques, the technology now represents what we believe to be the premiere solution for improving the profit margins of producers and transporters during today's economically challenging period of low spot prices and supply surplus.

#### About QS Energy, Inc.

QS Energy, Inc. (OTCQB: QSEP), provides the global energy industry with patent-protected industrial equipment designed to deliver measurable performance improvements to crude oil

pipelines. Developed in partnership with leading crude oil production and transportation entities, QS Energy's high-value solutions address the enormous capacity inadequacies of domestic and overseas pipeline infrastructures that were designed and constructed prior to the current worldwide surge in oil production. In support of our clients' commitment to the responsible sourcing of energy and environmental stewardship, QS Energy combines scientific research with inventive problem solving to provide energy efficiency 'clean tech' solutions to bring new efficiencies and lower operational costs to the upstream, midstream and gathering sectors. More information is available at: <a href="https://www.QSEnergy.com">www.QSEnergy.com</a>

### Image Available:

http://www.marketwire.com/library/MwGo/2016/12/5/11G124144/Images/GBigger-def958e4c7fcb4d981bbc476625939c6.jpg

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