

May 24, 2012



# US Department of Energy Conducts 24 Hour Testing of STWA Applied Oil Technology 1.2V

## US DOE Testing Generates Relevant Data for STWA's Crude Oil Viscosity Reduction System

SANTA BARBARA, CA -- (Marketwire) -- 05/24/12 -- [STWA, Inc.](#) (OTCBB: ZERO) ("STWA" or the "Company"), a developer of [applied solutions](#) for oil and fuel delivery systems in the multi-billion dollar oil pipeline and diesel engine markets, announced today that the United States Department of Energy RMOTC has conducted successful 24-hour testing of the Company's Applied Oil Technology AOT 1.2V at its test facility in Wyoming.

The following statements are taken verbatim from the US DOE RMOTC test report:

"In 2011, the AOT device was installed on a flow loop located at the RMOTC field test site in NPR-3. The flow loop -- a 4.4 mile, 6 inch, schedule 80 metal buried pipeline -- was modified specifically to support this viscosity reduction test. RMOTC validated overall system integrity after AOT installation, and filled the loop with field-produced API 34° oil to facilitate testing. The initial phase of testing in 2011 is detailed within "STWA Final Report: Viscosity Reduction Test" dated October 19, 2011, subsequent testing is detailed within "STWA, Inc Viscosity Reduction Technology" dated April 04, 2012.

The AOT device was removed in April 2012 and reworked to include a new, vertically-oriented, electrically-isolated chassis/skid design. The reworked device, referred to as the AOT 1.2V, was reinstalled on the test loop in May 2012. RMOTC again validated overall system integrity after the AOT 1.2V installation, and filled the loop with field-produced API 34° oil to facilitate this second phase of testing. The test was conducted for 24 consecutive hours, beginning at 12noon May 02, 2012 and concluding at 12noon May 03, 2012.

With the AOT device engaged, the viscosity of the oil was reduced by up to 56.12% compared to untreated oil at the same temperature. The viscosity was reduced to 51.8cP from 118.060cP at the 04:00am measurement. Overall reduced viscosity low was 47.8cP at 10:30pm 05/02/2012.

During the 24 hour test, the viscosity of the untreated oil would increase as the temperature decreased throughout the night. The viscosity of the untreated oil reached an overall high of 118.06cP at 04:00am 05/03/2012. The AOT treated viscosity of the oil at that time was 51.8cP, a 56.12% reduction in viscosity. The AOT treated oil demonstrated a

suppressed viscosity throughout the night, regardless of temperature reduction.

Pump power requirements were reduced throughout the test, reaching an overall maximum reduction of -56.12%, reducing from an untreated oil power requirement of 36.0kW to 15.8kW at 04:00am 05/03/2012. Untreated oil power requirements were increased throughout the test, reaching an overall high of +126.09%, increasing from a baseline of 15.9kW to 36.0kW at 04:00am 05/03/2012.

When the AOT was disengaged, viscosity and pressure were observed to revert slowly back to baseline, returning to baseline values after approximately 11 hours before the temperature viscosity reduction effect supplanted the AOT viscosity reduction effect.

Test results indicate that the viscosity reduction device operated successfully and that the AOT 1.2V prototype delivers improved performance over the original AOT prototype tested in October 2011 and again in March 2012. Pipeline line-loss and pump motor power consumption were reduced for a given flow rate during the observed test. The device may hold potential for energy savings and increased pipeline flow rates for the oil production and transportation industry."

This research was co-funded by STWA, Inc. and the Pipeline Research Council International (PRCI). Work was directed by Clarke Turner, Brian Haight, Wes Lintz, Wes Riesland, George Hughes, and Jeanette Buelt.

"This important 24 hour durability test, the substantial pressure drop reduction and the 11 hour viscosity-reduction effect duration, are some of the main aspects that the industry has been looking for from our testing," said Mr. Cecil Bond Kyte, STWA CEO. "Our goal is to provide the industry with some of the key parameters that are important to their needs and goals as operators worldwide. We are very happy with these important results and look forward to presenting the data to our industry interested parties further."

#### *About the US DOE Test*

The technology, currently in testing with the United States Department of Energy, is directed at improving the efficiency and throughput capacity of conventional energy infrastructure. The research was co-funded by STWA, Inc. and the [Pipeline Research Council International \(PRCI\)](#), the preeminent global collaborative research development organization of, by, and for the energy pipeline industry. Work was directed by Clarke Turner, Brian Haight, Wes Lintz, Wes Riesland, George Hughes and Jeanette Buelt, all of the United States Department of Energy Rocky Mountain Oilfield Testing Center. To view the U.S. DOE's report on these test results please visit:

<http://www.rmotc.doe.gov/testreports.html>

#### *About STWA, Inc.*

STWA, Inc. 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 property portfolio includes 24 domestic and international patents and patents pending, which have been developed in conjunction with and exclusively licensed from Temple University. STWA's technologies include Applied Oil Technology™ (AOT™) which is designed to improve oil flow through pipelines. AOT™ has been proven in U.S. Department of Energy

tests to increase the energy efficiency of oil pipeline pump stations. ELEKTRA™ improves diesel engine efficiency for industrial diesel engines, as well as diesel-powered trucks, trains, marine vessels, military fleets and jet turbines. More information including a company Fact Sheet, logos and media articles are available at: <http://www.stwa.com>.

#### *Safe Harbor Statement*

This press release contains information that constitutes forward-looking statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Any such forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from any future results described within the forward-looking statements. Risk factors that could contribute to such differences include those matters more fully disclosed in the Company's reports filed with the Securities and Exchange Commission. The forward-looking information provided herein represents the Company's estimates as of the date of the press release, and subsequent events and developments may cause the Company's estimates to change. The Company specifically disclaims any obligation to update the forward-looking information in the future. Therefore, this forward-looking information should not be relied upon as representing the Company's estimates of its future financial performance as of any date subsequent to the date of this press release.

Image Available: [http://www2.marketwire.com/mw/frame\\_mw?attachid=1993257](http://www2.marketwire.com/mw/frame_mw?attachid=1993257)

[Add to Digg](#) [Bookmark with del.icio.us](#) [Add to Newsvine](#)

#### Investor Relations Contacts:

Mr. Andrew Haag  
Managing Partner  
IRTH Communications, LLC  
Tel: +1-866-976-IRTH (4784)  
E-Mail: Email Contact  
Website: [www.irthcommunications.com](http://www.irthcommunications.com)  
Company Website: [www.stwa.com](http://www.stwa.com)

Mr. Jeremy Roe  
Managing Partner  
Integra Consulting Group, LLC  
Tel: +1-925-262-8305  
E-Mail: Email Contact  
Website: [www.integraconsultinggroup.com](http://www.integraconsultinggroup.com)

Source: Save The World Air, Inc.