



April 28, 2015

# Swire Oilfield Services and Hydro Dynamics successfully complete Water Heating Pilot Test

Spring Texas, - Swire Water Solutions LLC (SWS) and Rome, Georgia- Hydro Dynamics, Inc. (HDI) are pleased to announce they have completed pilot testing of Water Heating Technology utilizing ShockWave Power Reactors (SPR) for use in the water transfer process. The patent design Water Heating units utilize 1-each of the specialized HDI/SWS designed SPR and are each powered by 600 HP diesel engine. They can be permanently installed or trailer mounted for mobile applications. They will initially be tasked with the heating of related water and drilling fluids, but their flexible design will also allow use for mixing applications.

The SPR uses the powerful force of cavitation to allow fluids to be heated without fouling or scaling. In addition this process will reduce footprint size on location, water heating cost by 50-60% since it does not require any diesel or propane fired units which will further decrease environmental impact and will be an efficient safer process in heating fluids. The specialized technology will also provide excellent mixing through increased mass transfer and process intensification. The SPR is well suited for many of the diverse fluid processing application found in the petroleum industry.

"As a leading supplier of fluid management for the oil and gas industry, the Swire group is committed to bringing innovative technology that is not only cost effective but environmentally safe says Swire Water Solutions President Jerry Broussard. Swire is committed to our environment and bringing value to our clients' locations safely. The SPR water heating technology offers a smaller footprint and safer performance with no diesel or propane being utilized for direct heating. We are extremely excited to have Hydro Dynamics as a strategic partner and in the coming weeks SWS and HDI will announce additional advanced technology, and an added strategic partner that will deliver precise mixing applications and will further decrease the expense for our clients at the wellhead, while also reducing the environmental impact to Frac Fluids being pumped into the wellbore. Swire has a long-established reputation for integrity, professionalism and innovation, setting standards for operational excellence wherever we do business. We pride ourselves on being original and forward-looking – qualities that have guided our operations for close to 200 years.

As the global Swire Group journeys towards its third century, new challenges will inevitably arise: alongside an abiding focus on nurturing their own staff, on practical innovation and of course on commercial viability, our existing businesses must adapt to a world where everything that they do will be judged by its impact upon the environment and the community. Such an atmosphere will lead to change. Therefore the Swire family are committed to invest in new technology which are themselves part of the coming





environmental revolution — indeed, we have already taken our first few steps along this path with the mentioned technology with more to come in the coming months.

#### **About Swire Water Solutions**

Swire Water Solutions (SWS) is a part of the global conglomerate John Swire & Son group and in the Oil & Gas industry is the world's largest supplier of specialist offshore cargo carrying units and a leading supplier of modular systems, offshore aviation services and fluid management services.

Launched in 2013 Swire Water Solutions onshore division provides a wide range of onshore services to the North American shale oil & gas market and has already established itself as a market leader with its premium layflat hose, water treating systems, automated blending and fluids mixing units and fluid storage and management. Learn more at www.swirewater.com.

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# **About Hydro Dynamics**

Hydro Dynamics, Inc. is located in Rome, Georgia and is the developer and manufacturer of the cavitation based ShockWave Power Reactor (SPR). The SPR equipment uses the Physical phenomenon of cavitation, normally known as destructive force, and harnesses it to solve critical industrial mixing, extraction and heating problems. The technology The SPR can now be found on four continents in applications ranging from biodiesel production to hops extraction for beer. Learn more at: <a href="https://www.hydrodynamics.com">www.hydrodynamics.com</a>.

## **Pictures of Completed Skids**

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