

**2013 Technology Showcase Company Presenters**  
**Descriptions of Technologies**

September 24, 2013  
Convention Center – Philadelphia

**Green Field Energy Services** - <http://www.gfes.com/>

Green Field Energy Services utilizes 100% natural gas as a fuel source for hydraulic fracturing by providing solutions that center around Turbine Fracturing Pump technology. Green Field employs military grade turbine engines to power the fracturing pumps, which provide four major improvements versus conventional fracturing equipment in the areas of emissions, reduced footprint, fuel source flexibility and cost consideration.

Green Field has also developed Multi+Fuel™ advanced fuel control systems, which allow for immediate and automatic adjustments for changes in fuel quality or composition so that the maximum efficiency of the turbine is obtained, regardless of the fuel source, whether it be CNG, LNG, field gas, or diesel.

**MRI Global / Hittite** - <http://www.mriglobal.org/Pages/Default.aspx>

MRI Global and Hittite will present an innovative water recovery process from flowback water. The process uses naturally created high vacuum to distill the flowback water at low temperatures by using low grade heat sources typically available onsite. The vapors are condensed and the water collected and recycled for new frac operations or other purposes. Low temperature distillation results in significant reduction in O&M costs due to the high potential for reuse of the clean water. An innovative technique to create the vacuum eliminates the need for expensive vacuum pumps thereby achieving significant reduction in investment and O&M costs.

**Halen Hardy, LLC** - [www.halenhardy.com](http://www.halenhardy.com)

In January 2013, HalenHardy, LLC launched with the primary focus on protecting the health of workers' and their families by substantially reducing their exposure to dangerous respirable dusts (asbestos, lead, silica) during industrial activities. Its first product, the MASHH Mobile Air Shower by HalenHardy, helps remove dangerous dust from workers clothes in less than 30 seconds.

**Technical Drilling Tools** - <http://www.tdt-di.com/>

The SOFTRIDE® system is a patent pending hydro-mechanical axial and torsional shock & vibration dampening tool, specifically for retrievable tool strings...this is not a shock sub. The

tool is placed between the drilling motor and nonmag drill collar, where the typical UBHO sub resides. Goals are to reduce electronics failures and make mud pulse systems (MWD) more reliable; increase the mean time between failures (MTBF) and reduce repair & maintenance costs; and decrease nonproductive time (NPT) to the operating companies. A robust muleshoe cartridge assembly is the heart of the technology. Average dampening is 25% - 40% from prior baseline without the SOFTRIDE®. The system has been successfully run in all the major oil & gas basins and shale plays, in vertical, curve and lateral sections...some in one run. Prototype is nearing commercialization after 2-1/2 years of field testing and 4,000+ circulating hours.

**FuelCell Energy, Inc.** - <http://www.fce.com/>

FuelCell Energy, Inc. (NASDAQ: FCEL) is an integrated fuel cell company that designs, manufactures, installs, operates and services stationary fuel cell power plants. As a leading global fuel cell company, we provide ultra-clean, efficient and reliable baseload distributed generation for electric utilities, commercial and industrial companies, universities, municipalities, government entities and other customers around the world.

**Parsons Brinckerhoff** - <http://www.pbworld.com/>

Parsons Brinckerhoff is a global consulting firm assisting public and private clients to plan, develop, design, construct, operate and maintain hundreds of critical infrastructure projects around the world. We know very well that the projects our clients entrust to us significantly impact the lives of those who live and work in their communities because we live and work in those same communities. It is this fact that motivates the Parsons Brinckerhoff professionals who partner with our clients to design solutions to a broad range of technical, logistical and managerial challenges.

**ThermoEnergy Corporation** - <http://www.thermoenergy.com/>

ThermoEnergy is an integrated technologies company engaged in the worldwide development and sales of sustainable technologies for wastewater recovery and clean energy production. The company's water division is a leading provider of custom designed, turn-key wastewater treatment, chemical recovery and water conservation and reuse systems. The Company's energy division is developing a new advanced power plant design, known as POXC™ Pressurized Oxy-Combustion Technology, that combusts coal and other fossil fuels to provide energy with near zero emissions (including NOx, SOx, mercury and particulates) and captures 100% of the CO2 in pressurized liquid form for sequestration or beneficial reuse such as enhanced oil recovery.

**OsComp Systems** - <http://www.oscomp-systems.com/>

OsComp focuses on enhancing the value of natural gas by reducing transportation and storage costs through proprietary, innovative technology solutions. The company's three core businesses are compressor technology, virtual pipelines and nanotechnology. Its proprietary near isothermal compressor technology is a lower cost solution for producing wet gas. Its CNG virtual pipeline solutions enable a safe, cost effective, streamlined delivery system that allows customers to transition to low-cost natural gas as an energy source. Its nanotechnology was developed for storage and systems and to enable new natural gas applications. OsComp is headquartered in Houston, Texas and currently operates in Texas, Maine and Massachusetts.

**Polymics, Ltd.** - <http://www.polymics.com/>

Polymics,® Ltd. is the world's premier developer and manufacturer of ultra-high performance engineering polymers. With a wide range of manufacturing capabilities and our vertically integrated supply chain, Polymics offers a variety of products and services.

**Beitzel Corporation** - <http://www.themudster.com/>

For over 35 years Beitzel Corporation has provided a diversified portfolio of products and services to meet the needs of heavy industry. Combined with wholly-owned subsidiary Pillar Innovations, Beitzel provides services from well pad design and preparation, crane services, OTR services, cuttings handling, equipment rental, site restoration, electrical, site-wide automation, fabrication and machining. The company's most valuable asset is the dedicated employees who are available 24 hours a day. Combining experience and a can-do attitude allows Beitzel and Pillar to solve some of the most complex problems in the industry.

**Lafarge Oil & Gas** - <http://www.lafarge-na.com/wps/portal/na/en>

Lafarge LowDense™ is a lightweight, well cement platform used in well cementing applications. Well cements (a discrete product category) are an integral part of well cementing, a process critical to maintaining well integrity and zonal isolation. Well cements serve as a platform to 'end cementing systems' (or 'slurries'). Such systems typically require additives to achieve targeted performance criteria...and performance attributes are particularly important with horizontal well construction.

LowDense provides a platform to improve alternative, legacy systems in density ranges of 11.0–14.0 lb/gal. These attributes also provide the opportunity for improved efficiency of rig operations as a 'single system' solution, an innovation in its own right.

**Tethis, Inc** - <http://tethis.com/>

Tethis creates a foam that extracts dissolved solids from water. Tethex, our primary product, acts like a sponge, pulling salt out of water on contact. Tethex is a dry, organic, spongy biosorbent foam that has properties similar to exchange resins. Tethex has demonstrated the ability to absorb salts, scalants, metals, radioactive ions, and other materials from water without added heat or pressure leaving the water clean and ready for reuse or release. Tethex is protected by pending patents and based on university research and is made from plentiful, inexpensive, biodegradable waste streams from the pulp and paper and seafood industries.