SWC Insider - 2008

Tuesday, October 28, 2008

Welcome to the SWC Insider. If you have comments, information or suggestions you would like to share, please feel free to contact us at swc@ems.psu.edu

Enjoy your visit!

SWC Co-funded Projects Identified

The Executive Council recommended six projects for co-funding totaling $722,276, at the 2008 SWC Fall Meeting. The funding cycle for these projects will be January 1, 2009 to December 31, 2009. The projects are:

- A New Stimulation Technique to Improve Low Permeable Well-Bore Zone Characteristics, New Mexico Institute of Mining and Technology
- Soil Amendment Product for Oil Field Brine Contaminated Soil, RTA Systems

- Patented DownStroke Sucker Rod Pump Testing/Validation Proposal, Skillman DownStroke, LLC
- Feasibility Study of Tellus Production Stimulator, Tellus Hydrocarbon Development, Inc.
- Proppants Derived from Ion Exchanged Mixed Glass Cullet for Use in Gas-laden Shale Formations, The Pennsylvania State University
- Wireless Low Cost Downhole Fluid Level Detector Alarm for Rod Pump Based Well Production Optimization, Tubel LLC

2008 Marginal Wells: Fuels for Economic Growth

The 2008 Marginal Wells: Fuels for Economic Growth report from the Interstate Oil and Gas Compact Commission (IOGCC) will be available in late November. For the first time, the report has been expanded to offer a technology component. Nine projects from SWC are highlighted in the technology development section in three themes areas: 1) in the reservoir; 2) wellbore fluid removal:sub-surface systems; and 3) on the surface.

Foam Control for Natural Gas Wells Final Report (Composite Engineers)

The Foam Control for Natural Gas Wells final report is available to all full members in the member's only section of the SWC website. This 2006 project was completed under the direction of Sam Farris, Composite Engineers. The project was an effort to design, construct and test an economical system that could efficiently neutralize the chemical residues, turning them back into common liquids that are captured in the surface processing equipment at the well and to formulate a foaming agent that will revert to liquid at the surface and approach a neutral pH to help control subsurface corrosion.

Reducing Water Production in Mississippian Reservoirs Using Gelled Polymer Systems (Kansas University)

The Reducing Water Production in Mississippian Reservoirs Using Gelled Polymer Systems final report is available to all full members in the member's only section of the SWC website. This 2006 project was completed under the direction of Dr. Paul Willhite, University of Kansas. The project involved field testing to determine if the gelled polymer technology that had been successfully applied in Arbuckle reservoirs in Central Kansas could be extended to Mississippian reservoirs.

New Members

Welcome to the following new members:

- Freestone Resources, Arlington, TX
- Frontier Energy Systems, Bethel Park, PA
- MacKenzie Land & Exploration, Worthington, OH
- Monarch Environmental, Blackwood, NJ
- Production Plug, Big Springs, TX
- Sean Carrico, Eldred, PA
- Skillman DownStroke, LLC., Keller, TX

Executive Council Elections

The Stripper Well Consortium will be electing 4-members to serve on the SWC Executive Council for a two-year term (2009-2010). Full members are eligible for these elected positions. The Council's responsibilities include attending a 2-day proposal meeting to review and select proposals for SWC funding and are encouraged to serve on Ad hoc committees to steer the SWC research projects. The election form will be distributed in late November. The Consortium will compile a list of those who wish to serve on the Council and submit the list to the SWC Full and Affiliate membership for a formal vote. The election results will be announced in January 2009.

We would like to express a special thank you to the following 2007-2008 council members:

- Dee Combs, Chesapeake Energy
- Bill Fustos, East Resources
- John Holko, Lenape Resources
- Jim Ashbaugh, Pennsylvania General Energy

Another special thank you to the council members who will continue to serve until the end of 2009:

- Fred Fesenmyer, Minard Run Oil
- Paul Herzing, Texas Keystone
- Kirby Walker, Schlumberger

Stripper Wells Overlooked

A short segment on the role of stripper wells as part of the nation's energy solution was aired by CNN on September 17, 2008. Abbie Bourdeau, CNN visited Bradford, PA and spoke with Fred Fesenmyer, President of Minard Run Oil and SWC Executive Council member and Joel Morrison, SWC Director.

Yellow Dog Award

Congratulations to Fred Fesenmyer, President of Minard Run Oil, Bradford, PA and SWC Executive Council member (2008-09) for being awarded the Appalachian Basin's Yellow Dog Award at the 90th Annual Pennsylvania Oil and Gas Association's Annual Meeting on September 10, 2008. This award is bestowed on oilfield veterans whose lifelong commitment to the industry has made a difference to the progress of the Eastern oil and gas patch.

The prestigious award is named for the two-spouted, cast-iron oil lamps that illuminated drilling operations at primitive wooden derricks during the development of the East's oil and gas fields.

2008 SWC Fall Meeting and POGAM Exhibit

The 2008 SWC Fall Meeting was held on September 8-9, 2008 at the Sheraton Erie Bayfront, Erie, PA. Forty-five people attended this two-day meeting. The meeting focused on reviewing funding requests from the twelve proposals submitted requesting over $1.65M. The Executive Council met immediately following the close of the general meeting to consider all proposals.

As part of the SWC technology transfer, ten projects participated in the exhibit session at the Pennsylvania Oil and Gas Association's (POGAM) 90th Annual Meeting and Conference immediately following the close of the SWC Fall Meeting, on September 9-10, 2008. The projects were:

- Brandywine Energy and Development Company
- Greensburg Oil LLC
- Hydroslotter Corp
- University of Kansas, Center for Energy Research
- University of Kansas, Geological Survey
- Oil Well Sentry, Inc.
- PAAL, LLC
- R&A Moore, Inc.
- Stripper Well Consortium
- The Pennsylvania State University
- Ziebel

This two day event featured over 450 attendees, 100+ exhibitors, as well as special speakers, land/legal and technical presentations. The featured speakers were Aubrey McClendon, co-founder of Chesapeake Energy and Andrew Weissman, Energy Business Watch on the Marcellus Shale-Opportunities and Challenges in a Rapidly Changing Market.

Oklahoma Oil & Gas Trade Expo (October 16, 2008)

The SWC participated in the 2008 Oklahoma Marginal Well Commission's Oil and Gas Trade Expo on October 16, 2008 at the Oklahoma State Fairgrounds, Oklahoma City, OK. Nine SWC projects showcased their technology at the expo. The show was well attended with over 2000 attendees and 225 booths. For details on the October 15, 2009 Expo, visit the website: www.marginalwells.com

Mature Assets: Low-cost Plant Upgrades Marginal Gas Fields

New production from small, marginal fields containing low-BTU gas may help meet the demand for natural gas in the United States. The Demonstration of a Low Cost 2-Tower Micro Scale N_2 Rejection System to Upgrade Low-BTU Gas from Stripper Wells project appeared in the August 15, 2008 edition of E&P magazine at part of the Mature Assets feature. The project goals are to build and demonstrate the economic operation of a micro-scale N_2 rejection plant to upgrade low-BTU gas.

The micro-scale pressure swing adsorption (PSA) upgrade unit at Elmdale field, Chase County, Kansas is designed to handle up to 250 Mcf/d and expected to be economic at low feed volumes (250 mcf/d or less) and operate at low feed pressures typical of stripper wells in small and shallow gas fields. The project is a joint effort by the Kansas Geological Survey and the American Energies Corp. Updated details about project results can be fund at www.kgs.ku.edu/PRS/Microscale/index.html

Industry Tidbits

This section of the SWC Insider is dedicated to exchanging information and news from our industry members. It is open to all SWC members whether they have a SWC co-funded project or not. It is simply to let you know what your peers are thinking and doing. The views and opinions of the authors expressed herein do not necessarily state or reflect those of the SWC.

RMOTC Project Using Produced Water for Power

The Rocky Mountain Oilfield Testing Center (RMOTC) and Ormat Nevada Inc. finished installing Ormat?s Organic Rankine Cycle (ORC) power system at Naval Petroleum Reserve No. 3 (NPR-3) near Casper, Wyo., this summer. In August, the system was started up and is currently generating power.

Ormat Nevada Inc. partnered with RMOTC to test the concept of using oil-field waste water to power field production equipment. The purpose of the project is to validate the premise that a binary geothermal power generation system that uses hot water produced by an oil field can reliably generate commercial electricity. The power system is a commercial, air-cooled, skid-mounted standard design Ormat Organic Rankine Cycle (ORC) power plant. Ormat supplied the unit that RMOTC will operate for a 12-month test period.

Harnessing the available hot water produced during oil production to power the oil field could potentially lead to more economical access to reserves, especially in stripper fields such as NPR-3. The use of field-

proven and time-tested technologies to test geothermal application in the oil field builds confidence that this clean, renewable source could become commonplace in the oil fields of the future.

RMOTC, Partners Receive Tech Transfer Award

In 2007, WhisperGen Ltd. and BP America partnered with the Rocky Mountain Oilfield Testing Center (RMOTC) to begin testing a Stirling Cycle generator at Naval Petroleum Reserve No. 3 (NPR-3). As results of their long-term testing became available, the companies and RMOTC began efforts to inform the oil and gas industry of their progress. The Federal Laboratory Consortium (FLC) Mid-Continent region recently recognized the organizations? efforts with the Excellence in Technology Transfer award. The Excellence in Technology Transfer award recognizes those who have accomplished outstanding work in the process of transferring developed technology to the marketplace. A panel of experts from industry, state and local government, academia, and the federal laboratory system judge the nominations.

The Stirling Cycle generator offers a viable power alternative for remote locations that cannot economically be connected to utility power. The system has high reliability and little maintenance is required. WhisperGen and BP are continuing testing of the equipment at NPR-3 in to 2009.

To learn more about the SWC, please contact:
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