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## ABSTRACT

The Pennsylvania State University, under contract to the U.S. Department of Energy (DOE), National Energy Technology Laboratory (NETL) established a national industry-driven Stripper Well Consortium (SWC) that is focused on improving the production performance of domestic petroleum and/or natural gas stripper wells. The consortium creates a partnership with the U.S. petroleum and natural gas producers, trade associations, state funding agencies, academia, and the National Energy Technology Laboratory.

This report serves as the ninth quarterly technical progress report for the SWC. Key activities for this reporting period include:

- Develop and process subcontract awards for the nine projects selected at the 2006 Spring meeting;
- Continue distribution of the DVD on “Independent Oil: Rediscovering American’s Forgotten Wells”;
- Improving communications;
- New member recruitment;
- Identify SWC projects to be showcased for booth exhibition, preparing an exhibit, promoting and marketing for the 2006 Oklahoma Oil and Gas Trade Expo organized by the OK Marginal Well Commission, Oklahoma City, OK; and
- Identify projects and draft agenda for the fall technical workshop in Pittsburgh, PA.

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## **1.0 INTRODUCTION**

The Pennsylvania State University, under contract to the U.S. Department of Energy (DOE), National Energy Technology Laboratory (NETL), established an industry-driven stripper well consortium that is focused on improving the production performance of domestic petroleum and/or natural gas stripper wells. Industry-driven consortia provide a cost-efficient vehicle for developing, transferring, and deploying new technologies into the private sector. The Stripper Well Consortium (SWC) creates a partnership with the U.S. petroleum and natural gas industries and trade associations, state funding agencies, academia, the National Energy Technology Laboratory, and the National Petroleum Technology Office.

Consortium technology development research is conducted in the areas of reservoir remediation, wellbore clean up, and surface system optimization. Consortium members elect an Executive Council that is charged with reviewing projects for consortium co-funding. Proposals must address improving the production performance of stripper wells and must provide significant cost share. The process of having industry develop, review, and select projects for funding ensures that the consortium conducts research that is relevant and timely to industry. Co-funding of projects using external sources of funding is sought to ensure that consortium funds are highly leveraged.

## **2.0 EXPERIMENTAL**

A description of experimental methods is required by the DOE for all quarterly technical progress reports. In this program, Penn State is responsible for establishing and managing an industry-driven stripper well consortium. Technology development research awards are made on a competitive basis. Therefore, this section is not applicable to the Penn State contracted activities. Technical reports from the individual researchers are required to contain an experimental discussion section and are submitted to consortium members and DOE for their review.

### **3.0 RESULTS AND DISCUSSION**

This report addresses the activities for the reporting period from May 1, 2006 through July 31, 2006. During this time period efforts were directed toward the following activities:

- Develop and process subcontract agreements for the nine projects selected for co-funding at the April 2006 SWC Meeting;
- Continue distribution of the DVD on “Independent Oil: Rediscovering American’s Forgotten Wells”;
- Improving communications;
- New member recruitment;
- Identify SWC projects to be showcased for booth exhibition, prepare for exhibit, promote and market the 2006 Oklahoma Oil and Gas Trade Expo organized by the OK Marginal Well Commission, Oklahoma City, OK; and
- Identify projects and prepare draft agenda for the fall SWC Technology Transfer Workshop in Pittsburgh, PA.

#### **3.1 Processing Subcontract Agreements for 2006 SWC Projects**

The SWC provided \$1,241,429 to co-fund 9 projects in the last reporting period. In this quarter, efforts were directed to getting the subcontracts in place. Eight subcontracts are in place with a start date of July 1, 2006. The Colorado School of Mines (CSM) agreement is still under review and negotiations and remains outstanding as of July 31.

#### **3.2 DVD Distribution**

Interest in the DVD on “Independent Oil: Rediscovering American’s Forgotten Wells” continues primarily due to the article “Enhancing Industry’s Image Video Highlights Value of Stripper Wells” by Maggie Lee that appeared in the May 2006 issue of the American Oil and Gas Reporter, pgs. 40-41. In this quarter 1,530 DVDs have been distributed.

### **3.3 Improving Communications**

The SWC continues to promote the consortium using many different venues including electronic news, magazine articles, sponsorship of technical sessions, promotional packets and telephone follow-up to all inquiries, presentations, and participation in trade shows and expos.

A press release notice of the 2006 research projects identified for funding at the 2006 SWC Spring Meeting appeared in the PTTC e-mail alerts and the PTTC Networks News. A hard copy of the research project's announcement appeared in the PTTC Network News, Vol. 12, No. 3, 3<sup>rd</sup> Quarter 2006, page 11. The Stripper Well Consortium research project list appeared in the PTTC Alerts via e-mail in the May 25, 2006 e-news.

An article on The Pumper/Well Tender PDA Program for Small Producing Companies funded by the SWC appeared in the Oklahoma Stripper, June 2006, Vol. 11.2, page 1.

The SWC was one of the sponsors for the technical session at the Independent Oil and Gas Association of NY's (IOGA NY), 26<sup>th</sup> Annual Summer Meeting, BBQ, and Golf Tournament at the Peek'n Peak Resort, Findley Lake, NY on July 12 & 13, 2006. IOGA of NY and NYSERDA organized the event.

The SWC will be a gold level sponsor at the Midcontinent Oil and Gas Expo and Prospect Fair at the Highland Hotel and Convention Center in Great Bend, Kansas on September 12, 2006. This event is the first in many years in this region of the country. It will provide an opportunity for the SWC give a technical presentation on the benefits of the SWC, provide exposure for the SWC, as well as networking opportunities with industry representatives from companies in regions of Kansas, Oklahoma, Missouri, Colorado and Texas. This event is being organized and hosted by the Petroleum Technology Transfer Council and Kansas University Center for Research.

The SWC will be a platinum sponsor at the 2006 Oklahoma Oil & Gas Trade Expo on October 26, 2006. Eight to ten projects will be featured at this yearly event. Notification of the SWC sponsorship appeared in the Oklahoma Stripper, “2006 Trade Expo Sponsors & Exhibitors to Date”, June 2006, Vol. 11.2, pg. 9.

The SWC website continues to be updated (<http://www.energy.psu.edu/swc>). A second electronic newsletter has been drafted for distribution to the stripper well industry. The newsletter will improve communication between the spring and fall meetings. This online SWC newsletter will be sent to the SWC listserv and posted to the SWC website.

### **3.4 New Members**

The SWC membership continues to grow and broaden in its diversity. Recruiting additional members throughout 2006 will continue. During this quarter the following were added:

- EcoSafe Environmental, Newmarket Ontario, CANADA
- Indigo Oil, LLC, KY
- Pickrell Drilling Co., KS
- Polymer Services, LLC, KY

### **3.5 Upcoming Technology Transfer Meetings**

The SWC is planning the upcoming technology transfer meetings.

- ***Oklahoma City, OK*** The first meeting the 2006 Oklahoma Oil and Gas Trade Expo will be held in the southwestern US at the Travel and Transportation Building of the Oklahoma City State Fair Grounds in conjunction with the Oklahoma Marginal Well Commission on October 26, 2006. The SWC is a platinum sponsor of the expo and will showcase 8-10 projects in addition to featuring the benefits of the Stripper Well Consortium.
- ***Pittsburgh, PA***. The second event will be held in the northeastern US in Pittsburgh, PA at the Embassy Suites Pittsburgh International Airport hotel. The meeting will be in conjunction with the Pipeline Research Council International

(PRCI) Underground Storage Technical Planning Committee meeting and the Gas Storage Technology Consortium (GSTC) technology transfer meetings. The PRCI meeting will be on November 7, 2006. The GSTC meeting will be held on November 8, 2006, immediately following the PRCI meeting. The SWC technology transfer session will follow on November 9, 2006. The scheduling of back-to-back meetings will fit with the plans to strengthen the interactions between SWC, GSTC, and PRCI. This will expand the cross-fertilization of the two consortiums and allow delegates to conveniently attend all meetings. The meeting is in the final planning stage and will be organized to showcase SWC research projects. The meeting will feature a workforce and education panel, a roundtable discussion for the new 2006 projects, and a success panel - moving technology to commercialization - highlighting societal benefits and economic impact of several past and currently funded SWC projects.

### **3.6 Upcoming Activities for the Next Reporting Period**

During the next quarter the SWC will:

- Participate in the Midcontinent Oil & Gas Expo and Prospect Fair, Great Bend, KS;
- Participate in the 2006 Oklahoma Oil and Gas Trade Expo in Oklahoma City, OK;
- Prepare an application for the 2006 IOGCC Chairman's Environmental Stewardship Award competition;
- Continue member recruitment;
- Continue to update and improve the SWC web site
- Finalize and release another online SWC Insider newsletter
- Finalize the fall technology transfer workshop agenda for Pittsburgh, PA; and
- Continue to finalize the 2006 calendar.

## **4.0 CONCLUSIONS**

During this reporting period, the contracts for 8 co-funded projects were completed. One contract is still under review. Notice of the co-funded research projects appeared in the PTTC Network News and the PTTC e-mail alert. The Pumper/Well Tender PDA Program project appeared in the Oklahoma Stripper, June 2006. An article “Enhancing Industry’s Image Video Highlighting Value of Stripper Wells” highlighting the DVD titled “Independent Oil: Rediscovering American’s Forgotten Wells” appeared in the American Oil and Gas Reporter, May 2006.

The SWC is preparing for two regional technology transfer meetings, one in the southwest (Oklahoma region) and one in the northeast (Pennsylvania region) in the October/November time frame. The SWC has laid a solid foundation for continued membership growth and industrial-relevant technology transfer.

## **5.0 REFERENCES**

A listing of referenced materials is required by the DOE for each quarterly technical progress report. This technical progress report for the SWC did not utilize any reference material.

## **6.0 APPENDICES**