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## **ABSTRACT**

The Pennsylvania State University, under contract to the U.S. Department of Energy, National Energy Technology Laboratory will establish, promote, and manage a national industry-driven Stripper Well Consortium (SWC) that will be 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 industries and trade associations, state funding agencies, academia, and the National Energy Technology Laboratory.

This report serves as the third quarterly technical progress report for the SWC. Key activities for this reporting period include: 1) host the State College, PA fall Technology Transfer meeting, 2) revision of the SWC By-laws, 3) the SWC Executive Council nomination and election for 2005-2006 term members, and 4) finalizing the plans for the Spring Proposal Meeting in San Antonio, Texas.

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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), is in the process of establishing an industry-driven stripper well consortium that will be 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) will create 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 will be conducted in the areas of reservoir remediation, wellbore clean up, and surface system optimization. Consortium members elected an Executive Council that will be 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 will ensure that the consortium conducts research that is relevant and timely to industry. Co-funding of projects using external sources of funding will be 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 will be required to contain an experimental discussion section and will be submitted to consortium members and DOE for their review.

## **3.0 RESULTS AND DISCUSSION**

Key activities for this reporting period include: 1) host the State College, PA fall Technology Transfer meeting, 2) revision of the SWC By-laws, 3) the SWC Executive Council nomination and election for 2005-2006 term members, and 4) finalizing the plans for the Spring Proposal Meeting in San Antonio, Texas.

### **3.1 Fall Technology Transfer Meeting**

**State College, Pennsylvania.** The second technology transfer meeting was held at the Penn Stater Hotel and Conference Center in State College, PA on November 16, 2004. The meeting was host to presentations of 11 projects currently funded by the SWC. The event captured the attention of over 40 attendees including our international members, who traveled from both Venezuela and Canada to be part of the workshop. The meeting agenda is included as Appendix A.

### **3.2 Revision of the SWC By-Laws**

The SWC is revising its By-Laws to create a Supporting Membership tier which will allow companies that wish to submit proposals to the SWC the ability to engage the consortium at a reduced level of commitment. Under this scenario, companies pay a meeting registration fee which is due at the time of their proposal submission rather than applying for a Full membership. This scenario still will require the company to join the consortium to ensure they are aware and abide by the SWC governing principles – it's By-Laws.

The suggested changes were mailed to the SWC Executive Council which unanimously approved the suggested changes. The Consortium submitted these changes to the Department of Energy and is awaiting formal approval.

### **3.3 Executive Council 2005-2006 Term Nomination and Election**

On November 24, 2004 the SWC began the solicitation for 4 new Executive Council members to be elected to serve the 2005-2006 term on the Council. The deadline for responding to the

solicitation was December 13, 2004. At that time the SWC received response from 6 members who were interested in running for a seat on the Executive Council.

The election process began on December 16, 2004 with the voting concluded on January 3, 2005. The election results for the Executive Council 2005-2006 term are Energytec, Inc. (Don Lambert), Linn Operating, LLC (Paul Herzing), Oak Resources, Inc. (Ken Oglesby), and Universal Well Services (Bill Stoner).

### **3.4 SWC 2005 Spring Proposal Meeting**

The SWC is in the process of organizing its Spring meeting which will be dedicated to reviewing new proposals. The Spring meeting will be held on March 8-9, 2005, in San Antonio, Texas. At this meeting, presentations will be heard from the Principal Investigators of proposals submitted to the SWC for co-funding, in response the 2005 Request-for-Proposals.

## **4.0 CONCLUSIONS**

The SWC is preparing for it's upcoming fall technology transfer meetings and is in the initial phase of revising its By-Laws. The SWC has laid a solid foundation for technology development and membership growth for the upcoming year.

## **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**

## APPENDIX A: STATE COLLEGE, PA MEETING AGENDA



### WORKSHOP AGENDA

**State College Technology Transfer Workshop**  
State College, Pennsylvania  
(Penn Stater Conference Center, Executive Suites)  
**November 16, 2004**

8:00-9:00 Breakfast Buffet (The Gardens)  
Meeting Registration (Executive Suites)

9:00-9:15 Welcoming Comments  
Joel Morrison, *Stripper Well Consortium*

9:15-9:45 Design, Construction, and Evaluation of an Accurate, Low-Cost Portable Production Tester  
Ken Oglesby, *Oak Resources*

9:45-10:15 Produced Water Treatment: Developing a Project to Market a Program to Allow the Sale of Treated Oil Field Produced Brine for Beneficial Use  
David Burnett, *Texas A&M*

10:15-10:30 BREAK (Executive Suites)

10:30-11:00 PVT Study of the Interaction of Nitrogen and Crude Oil  
Assad Abboud, *Penn State University*

11:00-11:30 Low Friction Production Tubing for Stripper Gas Wells  
David Smith, *Dyna Coil*

11:30-12:00 Building and Testing a New Type of Compressor for Stripper Well Production Application  
Paul Weatherbee, *W&W Vacuum*

12:00-1:00 LUNCH (The Gardens)

1:00-1:30 Hydraulic Fracture Imaging  
Roger Willis, *Universal Well Services*

1:30-2:00 Plunger Conveyed Chemical System for Plunger Lift Well  
Sam Farris, *Composite Engineers*

2:00-2:30 Restimulation of Under-stimulated Shallow Gas Zones  
John Holko, *Lenape Resources, Inc.*

2:30-2:45 BREAK (Executive Suites)

2:45-3:15 Construct, Install, and Test GOAL Pumps  
Paul Yaniga, *Brandywine Energy Company*

3:15-3:45 Field Testing of the Vortex DXR Retrievable Insert Tool in  
Conjunction with Other Lifting Methods  
Tom Smith, *Vortex Flow*

3:45-4:15 Plunger Lift Process Optimization Using a Surface System  
Paul Tubel, *Tubel Technologies*

4:15-5:00 Informal Discussion – All

5:00 Meeting Adjourned