Progress Report – August, September, and October 2007  
Gas Over Bitumen Technical Solution  
Industry & Government Collaboration

**General Comments**

As directed by the Steering Committee on October 24, 2006, the Artificial Lift and Low Pressure SAGD subcommittees continue to meet and make good progress in 5 priority areas; re-pressuring fluid injection types, down hole instrumentation, solvent/co-injection recovery, impact of non-condensable gas, and history matching of field data.

**Artificial Lift**

**Down Hole Instrumentation**

A pressure and temperature measurement vendor workshop was conducted October 18, 2007. Six vendors made presentations; WellDynamics/Halliburton, OpSens, Petrospec, Promore, Schlumberger, and Sensornet. The vendor workshop focused on present current state of high temperature pressure and temperature measurement and what activities are required to advance the temperature application. This is in pursuit of a reliable and cost effective pressure measurement device capable of service at 270 C and higher.

**Fluid Injection Technology**

NAOSC is sponsoring a JIP for Development of a Guideline for Choosing Injection Fluids for the purpose of Re-pressuring a Gas Over Bitumen Zone. A contractor has been selected to conduct the work. The contract has not been awarded pending JIP participation. Positive response received from only four organizations. NAOSC is attempting to see if the JIP will advance with four participants.

**Low Pressure SAGD Performance**

**Solvent/co-injection Recovery Applications**

A workshop was held September 27, 2007 regarding advancing solvent/co-injection recovery applications. Presentations were made by EnCana, Laricina, Suncor, NAOSC, Nexen, Petro-Canada, ARC, ConocoPhillips, and N-Solv. ConocoPhillips is the JIP sponsor. The project is proceeding and agreements are executed. 13 organizations are participating.

**Impact of non-condensable Gas**

Nexen is the JIP sponsor. The JIP work scope is fully developed, presented & approved by the sub-committee in August 2007. Request for proposal issued on September 25, 2007. Deadline for commercial submission is October 31, 2007. Working group will convened in mid November to review submissions. Nexen legal is working on JIP contract. Plan to request for JIP participation for sub-committee participants in late November 2007. Target start date for JIP will be January 15, 2008

This is a three phase JIP which will identify gaps in current industry knowledge regarding the impacts of NCG on the SAGD process. The study will focus on opportunities and strategies to maximize the benefits of naturally generated or injected NCG’s during bitumen recovery by SAGD at lower pressures and in the presence of associated gas caps.

**History Matching of SAGD Field Data**

Project scope definition continues to progress.