

# Monthly Progress Report – April 2003

## Gas Over Bitumen Technical Solution

### Industry & Government Collaboration

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## **Artificial Lift**

### **E-Lift**

Rangewest Resources made a presentation to the Artificial Lift Sub Committee on April 10, 2003 regarding the application of E-Lift in low pressure SAGD operating conditions. The sub committee members are considering their interest, objectives, and the scope of a potential field test. The sub committee will meet on May 15, 2003 to scope out the details of a potential field test of E-Lift to assist in determining the viability of a Joint Industry Project.

### **High Volume SAGD Gear Pump**

The sub committee continues to address the scope of solving the concerns regarding the overall capital and operating costs associated with the hydraulic drive system, and the potential for bench scale testing before considering field testing of the system. The sub committee will move this issue forward at its May 15, 2003 meeting.

### **Low Pressure SAGD Wellbore Architecture**

The project has slipped behind schedule. As a result, C-Fer has added another team member to accelerate the evaluations of the drilling and completion concepts. First level evaluations were unable to effectively prioritize the concepts causing the evaluation to go into more detail.

## **Fluid Injection Technology**

### **Flue Gas Injection Project**

Flue gas injection has not yet been continuous due to mechanical problems with the compressor. Operational problems are expected to be corrected by mid May.

## **Lateral and Vertical Pressure Communication**

### **Piezometer data**

Promore will be presenting instrument drift and accuracy at the sub committee meeting May 7, 2003.

### **Injection Projects**

The sub committee is evaluating three potential re-injection pilots. One option is to move gas from one pool to another for re-pressurization. A second option is to conduct flue gas miscible flood after gas production. A third option is to inject water. The sub committee is working on defining the scope and objectives of pilot options.

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## **Shut-in Data Gathering and Interpretation**

### **Interpretation**

The sub committee continues to discuss 3<sup>rd</sup> party analysis and interpretation. The group will first develop an understanding of what issues and interpretations all parties agree on, and which they don't agree on. This will develop the potential scope of 3<sup>rd</sup> party analysis and interpretation. This will be an ongoing process that will include presentations from operators and instrument suppliers.

Additionally, the sub committee is advancing the ability to get the shut-in data into academic and research organizations for potential evaluation as research projects or Phd. Studies.

## **Low Pressure SAGD Performance**

Doug Komery has replaced Eddy Isaacs representing AERI on the Steering Committee. Bob King, Petro-Canada, now chairs the Low Pressure SAGD sub committee.

### **Performance**

The sub committee has prepared digital data from simulation work presented by N. Edmunds on low pressure SAGD performance, including, CDOR and SOR, over operating pressures of 500, 1000, and 1500 kPa. This included correlating the impact of sub cool. The correlations predict constant CDOR and SOR up to a sub cool of 25 degrees C. Sub committee members are reviewing their own modeling to see if this is the case in their work. The sub committee is cautious about drawing conclusions since the modeling has not been calibrated with field data at low pressures and low sub cools. This will be debated further at the May 15, 2003 meeting.

### **Field Testing**

The sub committee has developed a list of opportunities to conduct a field test of steam-solvent low pressure SAGD. The group will scope out the details of a potential field test at the May 15, 2003 meeting.