

Artificial Lift

Artificial Lift Simulator

RFP was issued and things are moving forward. Held information review meetings with Fractical Solutions, C-FER, and CMG. ConocoPhillips, Nexen, Paramount, Petro-Canada, and Suncor have participated in these meetings.

Noetic and IHS have declined to respond.

RFP has been sent to EPS Weatherford, ETI, Petro-study and Schlumberger for further consideration.

Bench Scale Testing of Lift Systems

The ESP test will continue as there are enough funds to complete the ESP and gear pump tests. The ESP test is expected to be complete by February 4, 2005.

Gear pump may be en-route to C-FER.

The twin screw pump may not be tested at C-FER. The JIP is investigating whether the vendor bench test system can duplicate the C-FER test criteria to compare directly to the tests at C-FER. Suncor may consider whether one of its twin screw pumps could be available for a C-FER test.

Low Pressure SAGD Wellbore Architecture

Final review meeting was held January 27, 2005. There are some favorable and interesting conclusions. This includes an economic model which evaluates the impact of changes in down hole configurations. C-FER will make a presentation to the sub committee March 1, 2005 to consider a potential Phase 3 study.

Suncor Low Pressure Artificial Lift Proposal

Participation Agreement was issued to potential parties February 10, 2005. Signed agreement and cheque for \$300,000 is expected by March 4, 2005.

First twin screw pump has been run in the hole and has been operating at approximately 500 m³/d.

ConocoPhillips, Devon, Nexen, Petro-Canada, and Total have expressed an interest.

Fluid Injection Technology

Paramount GRIPE Pilot

Nothing new to report.

EnCana Flue Gas Re-pressuring Pilot

Nothing new to report.

Lateral and Vertical Pressure Communication

Surmont Shut-in Data Analysis

Nothing new to report.

Low Pressure SAGD Performance

Deer Creek LP SAGD Field Testing

Nothing new to report.

ConocoPhillips LP SAGD E-Lift Field Testing Proposal

Nothing new to report.

Reservoir Lab Testing

Nothing new to report.

Executive Steering Committee

IETP

The technical sub committee reviewed and prioritized 4 new projects on February 1, 2005, and the Steering Committee reviewed the projects on February 3, 2005. The group determined whether the project had a low or high impact, and whether the impact was short term or long term.

Suncor Firebag LP SAGD Pilot was endorsed as it is testing the reservoir response at the lowest absolute operating pressure at 1000 kPa, is testing the impact of low sub cool's, and is testing the first down hole multi phase pump at low sub cools. The project was given a priority of 1. As a result of this discussion, the priority of Deer Creek LP SAGD test was moved from 2 to 1.

ConocoPhillips SAGD pilot was endorsed as it is testing the performance of LP SAGD when in contact with a low pressure water and gas zone. The project was given a priority of 1. As a result of this discussion, the ConocoPhillips LP SAGD mother of all pilots was changed to the mother of all pilots, as another operator may take over sponsorship. ConocoPhillips remains as sponsor.

EnCana Christina Lake re-pressuring test was previously endorsed. However, EnCana has expanded the test to include re-pressuring in a larger pool. This project is the only field test of re-pressuring technology, and is testing in a small and a large pool that is in contact with a bitumen zone that will undergo SAGD. The re-pressuring is required as the bitumen zone is in contact with low pressure top gas, and bottom water. The system needs to have a balanced pressure system to allow the operation of SAGD. The project was given a priority of 1.

EnCana EnCAID methane displacement pilot was endorsed. The test is similar to the Paramount GRIPE methane displacement project. However, this test is the opportunity to gather another data point in the deposit and in the Wabiskaw vs the

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McMurray. This project is also testing the injection of air with down hole combustion for removal of the oxygen. The project was given a priority of 2.

Nexen Long Lake Balanced ES SAGD Artificial Lift Pilot was new and was also endorsed. This is the first proposal to test ES SAGD at low pressures and is consistent with the need to test this technology that was identified in the future testing category. ES SAGD testing will help compare the performance of LP SAGD and ES SAGD at the same pressure and understand the difference in CDOR and CSOR of both processes. Additionally, there is potential for ES SAGD to utilize conventional readily available artificial lift equipment. The project was given a priority of 2.

The Steering Committee review included an assessment as to whether the project could be largely funded from the gas, in situ oil sands, or GOB areas of IETP funding.