9000-4100-32640-02



OIL AND GAS COMMISSION

February 12, 2009

Ryan Carduner Completions Engineer Shell Canada Limited 400 – 4<sup>th</sup> Ave S.W. Calgary, AB T2P 2H5

Dear Mr. Carduner:

## RE: WATER INJECTIVITY TEST APPROVAL <u>CSRI W FARRELL A- 004-I/094-B-01 (WA# 24448); BALDNONEL FORMATION</u>

The Commission has reviewed your application, dated December 2, 2008, requesting permission to conduct a temporary injectivity test into the Baldonnel formation of the subject well.

The proposed injectivity testing in this well is requested to determine if the Baldonnel formation is a suitable disposal zone for produced water from coalbed gas in the Farrell Creek area. The nearest Baldonnel gas production was over 17 km away from the now abandoned Butler – Baldonnel A and B pools. The pools produced 195  $10^3$ m<sup>3</sup> and 170  $10^3$ m<sup>3</sup> of gas, respectively.

On January 26 and February 3, 2009 the Baldonnel zone was completed within the subject well. A total of 1.6 m3 of water was recovered while swabbing the well. As such, the OGC is assured that the Baldonnel zone does not contain any producible hydrocarbons. Testing of this zone, including an injection test, will be required to determine suitability for disposal well operation.

Approval for temporary injectivity testing is hereby granted under Part 8, Division 3, Section 94 of the *Drilling and Production Regulation*, subject to the following conditions:

- 1. The test injection interval must be in the Baldonnel formation.
- 2. The total volume of injected water must not exceed 100 m<sup>3</sup>.
- 3. The disposal/injection pressure at the sandface must not exceed the formation fracture pressure.

Please note that a notice of an application for salt water disposal, once received, will be published on the OGC Website. Formal approval may be granted only if no objections are received by the closing date of the notice.

Sincerely,

Richard Slocomb, P. Eng. Supervisor, Reservoir Engineering