

OIL AND GAS COMMISSION

February 2, 2009

9045-7400-32640-02

David Scarpino, P.Eng. Exploiatation Engineer Nexen Inc. 801 – 7th Ave SW Calgary, AB T2P 3P7

Dear Mr. Scarpino:

RE: WATER INJECTIVITY TEST NEXEN TSEA b-16-I/94-O-08 (WA# 25113); DEBOLT FORMATION

The Commission has reviewed your application, dated January 19, 2009, requesting permission to conduct a temporary injectivity test into the Debolt formation of the subject well.

The drilling of this well is being conducted in support of Experimental Scheme #07-15-007 (Nexen Shale Project #3) for shale gas production. The well may be used as a source well to supplement frac fluid requirements. As such, the OGC will be assured that the Debolt zone will not contain any producible hydrocarbons. Circumstantial evidence would indicate that this location is prospective for water disposal in the Debolt formation. 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 Debolt formation.
- 2. Prior to injection, a production test must be attempted to evaluate hydrocarbon potential.
- 3. The total volume of injected water must not exceed 300 m³.
- 4. The disposal/injection pressure at the sandface must not exceed the formation fracture pressure.

Please note that a notice of your application has been posted to the OGC website, with February 16, 2009 as the closing date for any objections to be filed. Final approval will not be issued until well results, in a supplemental application, are reviewed by this office.

Sincerely,

Richard Slocomb, P. Eng. Supervisor, Reservoir Engineering