

October 2, 2009

2990-4900/7400-59070-20

James Nichols, P. Eng. Production Engineer Canadian Natural Resources Ltd. 2500, 855 – 2nd Street SW Calgary AB T2P 4J8

Dear Mr. Nichols:

RE: COMMINGLED PRODUCTION APPROVAL CNRL ET AL CHOWADE A-051-H/094-B-10; WA# 10077

The OGC has reviewed your application dated May 5, 2009 requesting approval to commingle gas production from the Debolt and Doig formations in the subject well. Both formations have been designated as single well gas pools.

The Debolt zone commenced production in February, 1998 at 25 10^3 m³/d and has declined to a current rate of 7.8 10^3 m³/d and is producing up the tubing. In December, 2001 the Doig was completed and brought on production at 10^3 m³/d through the well annulus and is currently producing at $18.6 ext{ } 10^3$ m³/d. Increasing liquid production from the Debolt has caused a production declined due to flow rates dropping below the critical flow rate. Commingled production through a single tubing string is expected to maximize production and reserve recovery from both zones. Due to the variation in H2S content between the zones (Debolt – 2.7%, Doig - 62 ppm), a free flow check valve will be installed to allow one way gas flow from the annulus to tubing to prevent crossflow.

We wish to advise you that your application to commingle production from these zones is hereby granted approval, under the authority of Section 41 of the *Drilling and Production Regulation*, subject to the following conditions:

- 1. Production from the Debolt (2918.4 3252.0 mKB), and Doig (1977.0 2011.0 mKB) zones may be commingled.
- 2. Gas, condensate and water production should be allocated on the Ministry of Finance BC S-1, BC S-2 and BC-08 forms on the basis of Debolt 40% and Doig 60%. The allocation factors may be amended to reflect results of any future tests.
- 3. This approval may be modified at a later date if deemed appropriate through a change in circumstances.

Should you have any questions, please contact the undersigned at (250) 419-4421 or Travis Mercure at (250) 419-4448.

Sincerely,

Richard Slocomb, P. Eng.

Supervisor, Reservoir Engineering