

OIL AND GAS COMMISSION

February 12, 2009

9000-4100-32640-02

Trevor Samis, E.I.T. Petroleum Engineer Progress Energy Ltd. 1200, 205-5th Avenue S.W. Calgary, Alberta T2P 2V7

Dear Mr. Samis:

RE: SALT WATER DISPOSAL APPROVAL <u>PRQ HZ KAHTA C- 061-K/094-G-07 (WA# 13815); BALDONNEL FORMATION</u>

Commission staff have reviewed your application received January 13, 2009 requesting permission to dispose of produced water into the Baldonnel formation of the subject well.

The subject well contains an open hole horizontal leg through the Baldonnel formation. In August, 2001 the Baldonnel was stimulated with an acid squeeze. During the subsequent flow test, the well produced a significant amount of water (768 m³) and the gas rate declined from 56 10^3 m³/d to 2.8 10^3 m³/d over an 88 hr period. As such, the OGC is confident that the Baldonnel zone does not contain any commercially producible hydrocarbons.

An injectivity test, (approved December 8, 2008), was performed December 17, 2008 to determine the potential for water disposal in the Baldonnel. A total of 92 m³ of produced water from the Halfway and Debolt formations was disposed of over a 6 hr period, indicating the Baldonnel zone has good ability to accept water. No fluid compatibility issues are anticipated for the proposed disposal of produced Halfway and Debolt water into the Baldonnel formation based on test results and existing disposal wells.

We concur that the subject well appears to be a good candidate for salt water disposal in the Baldonnel formation. Notice of your application was posted on the OGC website and no objections were received.

Attached is Approval 09-02-002 for the application, granted under Part 8, Division 3, Section 94 of the *Drilling and Production Regulation*.

Should you have any questions, please contact the undersigned at (250) 952-0366 or Kelly Okuszko, at (250) 952-0325.

Sincerely,

Richard Slocomb, P.Eng. Supervisor, Reservoir Engineering Resource Conservation

Attachment

APPROVAL 09-02-002

THE PROVINCE OF BRITISH COLUMBIA <u>PETROLEUM AND NATURAL GAS ACT</u> DRILLING AND PRODUCTION REGULATION OIL AND GAS COMMISSION

IN THE MATTER of a scheme of Progress Energy Ltd. (Progress) for Salt Water Disposal in the Caribou area Baldonnel formation in the well PRQ HZ KAHTA C-061-K/094-G-07 (WA# 13815).

NOW, THEREFORE, pursuant to Part 8, Division 3, Section 94 of the *Drilling and Production Regulation*, the scheme is hereby approved, as such scheme is described in

an application from Progress to the Commission received January 13, 2009 and related submissions.

- 1. The disposal interval must be in the Baldonnel formation.
- 2. A record of volume of salt water disposed of through this well must be included on a Monthly Injection/Disposal Statement, in the prescribed form (BC-S18), which must be submitted to the Oil and Gas Commission not later than the 25th day of the month following the reported month.
- 3. The disposal/injection pressure at the sandface must not exceed the formation fracture pressure.
- 4. The Commission must be notified in writing of the date of commencement of disposal.
- 5. This approval may be modified or rescinded if deemed appropriate through a change in circumstances.

Richard Slocomb Supervisor, Reservoir Engineering Resource Conservation Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this <u>12th</u> day of February 2009.