



June 24, 2008

5200-4500/4800-59070-20

S. Aidan Campbell, P.Eng.  
Petro-Canada Oil and Gas  
P.O. Box 2844  
Calgary AB T2P 3E3

Dear Mr. Campbell:

**RE: INTERIM COMMINGLED PRODUCTION APPROVAL**  
**PC KOBES b-098-A/094-B-09; WA# 18174**

The Commission has reviewed your application dated May 1, 2008 for approval to commingle gas production from the Charlie Lake and Halfway zones encountered in the subject well.

Your request for an interim approval is intended to allow the acquisition of additional supporting data for a formal commingling application. The well is currently completed in the Halfway zone (1693.0 – 1753.0 mKB) and is designated to the Kobes Halfway “A” pool. The Halfway has been on production since February 2005 and production has remained fairly stable at  $\sim 40 \text{ } 10^3 \text{ m}^3/\text{d}$ . The well has produced  $38 \text{ } 10^6 \text{ m}^3$  from the Halfway to date. The Charlie Lake is expected to be marginal producer with an initial rate of  $\sim 15 \text{ } 10^3 \text{ m}^3/\text{d}$ , based on log analysis and offset production. Therefore, commingled production through a single tubing string is expected to reduce liquid loading and maximize production and reserve recovery.

A sliding sleeve will be used to prevent crossflow during shut-ins, as there is an estimated pressure difference of  $\sim 5 \text{ MPaa}$  between the zones, based on existing pool data. Gas compositions should be similar for the two zones, with  $\sim 3\%$   $\text{H}_2\text{S}$  each. Precedence for commingled production has been established, as 6 out of 10 wells designated to the Halfway “A” pool are approved for commingling with the Charlie Lake.

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

1. Production from the Charlie Lake and Halfway formations may be commingled.
2. A supplementary application for commingled production, with supporting test data and gas analysis, must be submitted, with proposed allocation factors for production reporting.
3. AOF and reservoir pressure reports, based on available data, must be filed for the Charlie Lake zone as per the requirements of sections 84 and 95 of the *Regulation*.
4. Formal approval for commingled production **will not** be authorized until all of the above listed conditions have been met.

Should you have any questions, please contact the undersigned at (250) 952-0366 or Kelly Okuszko at (250) 952-0176.

Sincerely,

Richard Slocomb, P. Eng.  
Supervisor, Reservoir Engineering

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**RESOURCE CONSERVATION**

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