



OIL AND GAS COMMISSION

February 3, 2006

5200-4610/4800/4900-59070-20  
OGC – 06033

Ken Walchuck, P.Eng.  
Exploitation Engineer  
Canadian Natural Resources Limited  
2500, 855 – 2<sup>nd</sup> Street SW  
Calgary AB T2P 4J8

Dear Mr. Walchuck:

**RE: APPROVAL FOR COMMINGLED PRODUCTION  
CNRL et al Kobes b-17-J/94-B-9; WA# 19749**

The Commission has reviewed your application dated January 18, 2006 requesting approval to commingle gas production from the Artex, Halfway and Doig zones encountered in the subject well.

OGC staff have evaluated these zones as the Kobes field - A Marker/Base of Lime "A", Halfway "D" and Doig "D" non-associated gas pools. The A Marker and Doig are both single well pools, with limited apparent reserves, tested at gas rates of 1 e<sup>3</sup>m<sup>3</sup>/d and 4 e<sup>3</sup>m<sup>3</sup>/d, respectively. The Halfway "D" is a two well pool, currently producing from the well PC Townsend c-96-G/94-B-9 (WA 7021). The well c-96-G was previously approved to commingle the Halfway "D" and a separate Doig "C" pool.

All zones contain sour gas, however the A Marker has considerably higher H<sub>2</sub>S content, albeit at low gas rates measured during testing. A letter of no objection to commingled production of these zones has been provided from the operator of the off-setting well c-96-G. As all 3 zones tested gas at marginal rates and will likely access limited reserves, commingled production is appropriate to allow economic production and reserves recovery.

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 A Marker (1697.0 - 1702.0 mKB), Halfway (1746.0 – 1778.0 mKB) and Doig (1825.0 - 1835.0 mKB) formations may be commingled.
2. Gas, water and condensate production should be allocated on the Ministry of Small Business and Revenue BC S-1 and BC S-2 forms on the basis of A Marker/Base of Lime 10 %, Halfway 45% and Doig 45%. 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) 952-0310.

Sincerely,

Ron Stefik, AScT  
Sr Reservoir Engineering Technician

**Approval Letters to Industry  
COMMINGLED PRODUCTION  
Copy 8**

<input type="checkbox"/>	Wellfile (originals)
<input type="checkbox"/>	59070-20
<input type="checkbox"/>	Daily
<input type="checkbox"/>	Resource Revenue
<input checked="" type="checkbox"/>	R. Stefik
<input type="checkbox"/>	G. Farr
<input type="checkbox"/>	R. Slocomb
<input type="checkbox"/>	D. Krezanoski

**RESOURCE CONSERVATION BRANCH**

PO Box 9329 Stn Prov Gov't, Victoria BC V8W 9N3 Tel: (250) 952-0302 Fax: (250) 952-0301  
Location: 6<sup>th</sup> Flr 1810 Blanshard St, Victoria BC

Headquarters: #200, 10003 110<sup>th</sup> Ave, Fort St. John BC V1J 6M7 Tel: (250) 261-5729 Fax: (250) 261-5744 www.ogc.gov.bc.ca