



August 9, 2002

760-4800-59240-09
OGC - 02130

Wayne Kennedy, P.Eng.
Exploitation Engineer
Canadian Natural Resources Limited
2500, 855 - 2 Street S.W.
CALGARY, AB T2P 4J8

CNRL Project (06)

Dear Mr. Kennedy:

**RE: WATERFLOOD PRESSURE MAINTENANCE APPROVAL AMENDMENT #1
BEAVERTAIL HALFWAY "B" POOL**

The Commission has reviewed your application dated August 2, 2002 wherein you requested an amendment to the waterflood pressure maintenance scheme approval for the subject oil pool.

Attached is Approval #97-09-003 (Amendment #1) for the application, granted under section 100 of the Petroleum and Natural Gas Act.

The re-completion of the well d-79-A/94-A-15 (WA 6313) to a water injector should improve oil recovery due to better pressure support in the northern portion of the pool. The project area remains unchanged from the previous approval.

Sincerely,

Craig Gibson, P. Eng.
Manager
Reservoir Engineering and Geology

Attachment

**Approval Letters to Industry
GEP, SWD, CONCURRENT PROD,
PRESSURE MAINTENANCE,
WATERFLOOD, ETC.**

Copy 10

<input type="checkbox"/>	Wellfile (originals)
<input type="checkbox"/>	59240
<input type="checkbox"/>	Daily
<input type="checkbox"/>	Resource Revenue
<input type="checkbox"/>	S. Chicorelli
<input checked="" type="checkbox"/>	R. Stefik
<input type="checkbox"/>	G. Farr
<input type="checkbox"/>	P. Attariwala
<input type="checkbox"/>	C. Gibson
<input type="checkbox"/>	D. Krezanoski

ENGINEERING AND GEOLOGY BRANCH

PO Box 9329 Stn Prov Gov't, Victoria BC V8W 9N3 Tel: (250) 952-0302 Fax: (250) 952-0291
Location: 6th Flr 1810 Blanshard St. Victoria BC

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

APPROVAL 97-09-003 (AMENDMENT #1)

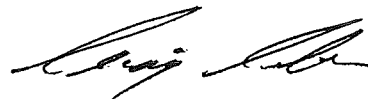
**THE PROVINCE OF BRITISH COLUMBIA
PETROLEUM AND NATURAL GAS ACT
OIL AND GAS COMMISSION**

IN THE MATTER of a pressure maintenance scheme of Canadian Natural Resources Limited (CNRL) for waterflood recovery of oil by water injection into the Beavertail Halfway "B" pool.

NOW THEREFORE, the Commission, pursuant to section 100 of the Petroleum and Natural Gas Act, R.S.B.C.1996, c.361 orders as follows.

The pressure maintenance scheme of CNRL for waterflood recovery of oil from the Beavertail Halfway "B" pool as described in the Application from CNRL dated June 6, 1996 and August 2, 2002 is hereby amended, subject to the following terms:

1. The project area of the pressure maintenance scheme consists of units 58, 59, 68, 69, 78 - 80 and 88 - 90 Block A/94-A-15.
2. The project oil production allowable is 90 m³/d.
3. Water may be injected into wells d-58-A, d-69-A and d-79-A/94-A-15.
4. The injection pressure at the sandface must not exceed the formation fracture pressure.
5. All associated gas production must be conserved.
6. An oil well may be drilled anywhere within the project area provided that it is not completed within 100 m of the boundary of the project area.
7. Progress reports shall be filed as stipulated in Section 8 of the *Petroleum and Natural Gas General Regulation*.
8. The operations of the pressure maintenance scheme are subject to periodic review, and modification to the approval may be ordered, if deemed appropriate.



Craig Gibson
Manager
Reservoir Engineering and Geology

DATED AT the City of Victoria, in the Province of British Columbia, this 9th day of August 2002.