

Oil and Gas Commission

February 22, 1999

File: 7000-4800-59240-09

Ref: OGC990139

Mr. Larry Galea, P.Eng.
Exploitation Engineer
Canadian Natural Resources Limited
2000, 425-1st Street S.W.
Calgary, AB T2P 3L8

CNRL Project (03)

Dear Mr. Galea:


Re: Waterflood Pressure Maintenance Approval, Amendment #1
Peejay West Halfway "A" Pool

The Oil and Commission has reviewed your application dated February 12, 1999, wherein you requested amendments to the existing approval for waterflood pressure maintenance in the subject oil pool.

Attached is Approval # 96-09-007 (Amendment #1) for the application, granted under section 100 of the Petroleum and Natural Gas Act.

This amendment incorporates a revised water injection location and provides for a voidage replacement based production allowable. Overproduction of oil to the end of February 1999, under the previous daily oil allowable of 80.0 m³, is hereby waived.

Sincerely,



Bou van Oort
Director
Engineering and Geology Branch

Attachment

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

Copy

<input type="checkbox"/>	Wellfile (originals)
<input type="checkbox"/>	59240
<input type="checkbox"/>	Daily
<input type="checkbox"/>	Resource Revenue
<input checked="" type="checkbox"/>	R. Stefik
<input type="checkbox"/>	G. Farr

Email

<input type="checkbox"/>	D. Krezanowski
<input type="checkbox"/>	S. Chicorelli

APPROVAL 96-09-007 (Amendment #1)

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

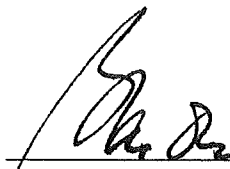
IN THE MATTER of a pressure maintenance scheme of Canadian Natural Resources Limited (CNRL) for waterflood recovery of oil by water injection into the Peejay West Halfway "A" pool.

NOW, THEREFORE, the Commission, pursuant to section 100 of the Petroleum and Natural Gas Act, hereby approves an amendment to the pressure maintenance scheme of CNRL for waterflood recovery of oil from the Peejay West Halfway "A" pool, as such scheme is described in

an Application from CNRL to the Commission dated November 5, 1996 and February 12, 1999, and related submission.

The scheme is approved, subject to the conditions herein contained and, in particular:

1. The area of the pressure maintenance scheme shall consist of units 32, 33, 42-44, 53, 54, 64 and 65 of Block G/94-A-15.
2. The project oil allowable for a month shall be based on the previous month's voidage replacement.
3. Water may be injected into the wells c-33-G and b-44-G/94-A-15.
4. The injection pressure at the sandface must not exceed the formation fracture pressure.
5. Equipment must be installed at the well head of water injection wells to ensure that fracturing of the formation does not occur.
6. All associated gas production must be conserved.
7. An oil well may be drilled anywhere within the project area provided that it is not completed nearer than 100 m to the sides of the project area.
8. Progress reports shall be filed as stipulated in Section 8 of the British Columbia *Petroleum and Natural Gas General Regulation*.
9. The operations of the pressure maintenance scheme will be subject to periodic review, and modification to the approval may be ordered, if deemed appropriate.



Bou van Oort, P.Eng.
Director
Engineering and Geology Branch

DATED AT the City of Victoria, in the Province of British Columbia, this 22 day of February, 1999.