



OIL AND GAS COMMISSION

July 16, 1999

File: 2400-4805-59240-09
OGC 990403

Mr. Dick VanAppelen, P. Eng.
Exploitation Engineer
Canadian Natural Resources Limited
2000, 425 - 1st Street SW
Calgary, AB T2P 3L8

CNRIL PILOT PROJECT (17)

Dear Mr. VanAppelen:

**RE: APPLICATION FOR PRESSURE MAINTENANCE APPROVAL
BUICK CREEK LOWER HALFWAY "I" POOL**

This refers to your application dated June 2, 1999 wherein you requested approval of a waterflood pressure maintenance scheme in the subject oil pool.

As this waterflood proposal is designed to investigate the merits of an alternative depletion mechanism for this pool it is treated as a pilot project.

Attached is Approval # 99-09-004 for the application, granted under section 100 of the Petroleum and Natural Gas Act.

Yours sincerely,

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

Attachment

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

Copy

- Wellfile (originals)
- 59240
- Daily
- Resource Revenue
- R. Stefik
- G. Farr

Email

- D. Krezanowski
- S. Chicorelli

C. Gibson

P.S. Attarimale

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 99-09-004

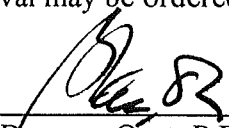
THE PROVINCE OF BRITISH COLUMBIA
PETROLEUM AND NATURAL GAS ACT
OIL AND GAS COMMISSION

IN THE MATTER of a pressure maintenance scheme of Canadian Natural Resources Limited (CNRL) for waterflood recovery of oil by water injection into the Buick Creek Lower Halfway "T" Pool.

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 Buick Creek Lower Halfway "T" Pool as such scheme is described in the Application from CNRL to the Oil and Gas Commission (Commission) dated June 2, 1999 is approved, subject to the terms herein contained.

1. The pilot pressure maintenance scheme area shall be delineated by units 43, 53 - 55, 63 - 65, 73 - 75 and 84 - 85 of Block A/94-A-14.
2. The daily oil allowable is waived.
3. Water may be injected into the Buick Creek Lower Halfway "T" Pool through the wells c-43-A/94-A-14, WA 9898 (two bottom hole locations, b-52-A/94-A-14 and d-54-A/94-A-14) and a-74-A/94-A-14, WA 10423 (bottom hole location d-75-A/94-A-14).
4. The scheme shall be deemed to have commenced upon water being injected into the wells referred to in clause 3.
5. The Commission must be notified in writing of the date of water injection commencement.
6. All associated gas production must be conserved.
7. The injection pressure at the sandface must not exceed the formation fracture pressure.
8. Progress reports shall be filed as stipulated in Section 8 of *the Petroleum and Natural Gas General Regulation*.
9. The operations of the pilot 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
Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this *6th* day of July, 1999.