



September 5, 1997

6460-4520-59240-09
970797

Mr. R. R. Padget, P. Eng.
Manager, Engineering
Encal Energy Ltd.
1800, 421 Seventh Avenue SW
Calgary, AB T2P 4K9

Dear Mr. Padget:

**RE: APPLICATION FOR AMENDMENT TO PRESSURE
MAINTENANCE APPROVAL Oak Cecil "E" Pool**

This refers to your application dated July 31, 1997 wherein you requested an amendment to the waterflood pressure maintenance scheme in the Oak Cecil "E" oil pool.

Based on a review of the Progress Report No. 1, it is concluded that the waterflood has been very successful in this pool. Consequently, your request is hereby approved. Attached is Approval # 96-09-002 (Amendment #1) for the application, granted under section 100 of the *Petroleum and Natural Gas Act*.

Please note that the voidage calculations must be submitted in the Progress Report.

Yours sincerely,

B. van Oort, P. Eng.
Director
Engineering and Operations Branch

Copies for Approval Letter to Industry (11)
RE: GEP, Salt Water Disposals, etc.

- | | |
|--------------------------|-----------------------|
| <input type="checkbox"/> | G. Milltenberger |
| <input type="checkbox"/> | Data Management |
| <input type="checkbox"/> | R. Stefik |
| <input type="checkbox"/> | D. Richardson (PGE) |
| <input type="checkbox"/> | P. Attariwala |
| <input type="checkbox"/> | G. Farr |
| <input type="checkbox"/> | S. Chicorelli (PGE) |
| <input type="checkbox"/> | Resource Revenue |
| <input type="checkbox"/> | 59240 |
| <input type="checkbox"/> | Wellfiles (originals) |
| <input type="checkbox"/> | Daily |

Attachment


APPROVAL 96-09-002 (AMENDMENT #1)

**THE PROVINCE OF BRITISH COLUMBIA
PETROLEUM AND NATURAL GAS ACT
MINISTRY OF EMPLOYMENT AND INVESTMENT
ENERGY AND MINERALS DIVISION**

IN THE MATTER of a pressure maintenance scheme of Encal Energy Ltd. (Encal) for waterflood recovery of oil by water injection into the Oak Cecil "E" Pool.

The approval granted pursuant to section 100 (previously s. 116) of the Petroleum and Natural Gas Act, hereby amended as follows:

1. The pressure maintenance scheme of Encal for waterflood recovery of oil from the Oak Cecil "E" Pool as such scheme is described in the Application from Encal to the Ministry dated March 11, 1996 and supplement dated July 31, 1997 is hereby approved, subject to the terms herein contained.
2. The pressure maintenance scheme area shall be delineated by NW/4 Section 17, Section 20, W/2 Section 28, S/2 and NE/4 Section 29, and Section 33-86-18 W6M.
3. The project oil production for a month shall be based on the previous month's voidage replacement.
4. Water may be injected into the Oak Cecil "E" Pool through the wells 3-20 and 9-29-86-18 W6M.
5. The injection pressure at the sandface must not exceed the formation fracture pressure.
6. All associated gas production will be conserved.
7. An oil well may be drilled anywhere within the scheme area provided that it is not nearer than 100m to the sides of the scheme area.
8. Progress reports shall be filed as stipulated in Part 9, section 108 of the British Columbia Drilling and Production 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, by the Director of the Engineering and Operations Branch.



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

DATED AT the City of Victoria, in the Province of British Columbia, this 5th day of September, 1997.