Oil and Gas Commission

February 24, 1999

OGC990176 7600-4520-59240-09

Mr. Geoffrey W. Beatson, P. Eng. Encal Energy Ltd. 1800, 421 - Seventh Ave S.W. CALGARY, AB T2P 4K9 Encal/Newport Proj (02)

Dear Mr. Beatson:

RE: PRESSURE MAINTENANCE APPROVAL RIGEL CECIL '1' POOL

This is with reference to your application dated January 22, 1999 wherein you requested a waterflood pressure maintenance approval in the subject oil pool.

Attached is Approval #99-09-001 for the application, granted under section 100 of the <u>Petroleum and Natural Gas Act</u>.

A number of wells in this pool have accumulated significant overproduction of their individual well daily oil allowables. In order to allow greater flexibility in pool operation at the initiation of this waterflood, past overproduction up to February 28, 1999, is hereby waived.

The project allowable of 213.3 m³ for this scheme, effective March 1, 1999, remains subject to a GOR adjustment factor, as per section 73(7) of the *Drilling and Production Regulation*. Overproduction of this oil allowable will result in a requirement for shutting in the pool to retire all overproduction, as per section 82 of the *Regulation*.

Sincerely,

B. van Oort, P. Eng.

Director

Engineering and Operations Branch

Attachment

GEP, SWD, CONCURRENT PROD, PRESSURE MAINTENANCE, WATERFLOOD, ETC.

Copy

Wellfile (originals)

59240

Daily

Resource Revenue

R. Stefik

G. Farr

Email

D. Krezanowski
S. Chicorelli

Approval Letters to Industry

APPROVAL 99-09-001

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

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

The Commission, pursuant to Section 100 of the <u>Petroleum and Natural Gas Act</u>, R.S.B.C. 1996, c.361 orders as follows:

The pressure maintenance scheme of Encal for waterflood recovery of oil from the Rigel Cecil "I" Pool as described in the application from Encal to the Ministry dated January 22, 1999 is approved, subject to the following terms:

- 1. The project area of the pressure maintenance scheme consists of NE/4 sec 8, W/2 sec 16, E/2 & SW/4 sec 17, W/2 & NE/4 sec 21, sec 27, E/2 & SW/4 sec 28, E/2 frac sec 33, fract sec 34 of Twp 88 Rge 18 W6M, frac unit 12, frac unit 13, unit 22 and unit 23 of Block K/94-A-10.
- 2. The reserves based project daily oil allowable is 213.3 m³.
- 3. Water may be injected into the Rigel Cecil "I" pool through the wells 13-27 and A2-28-88-18 W6M.
- 4. The scheme is 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 commencement.
- 6. The injection pressure measured at the sandface must not exceed the formation fracture pressure.
- 7. All associated gas production will be conserved.
- 8. An oil well may be drilled anywhere within the project area provided that it is not nearer than 100 m to the sides of the project area.
- 9. Royalty exempt oil production entitlement for the discovery well Encal Rigel 4-21-88-18 W6M (WA 10648) is limited to a volume of 11, 450 m³ or the volume produced in the first 36 producing months, whichever is lesser.
- 10. Progress reports shall be filed as stipulated in Section 8 of the *Petroleum and Natural Gas General Regulation*.

11. 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

Director

Engineering and Geology Branch

DATED AT the City of Victoria, in the Province of British Columbia, this 24 day of February, 1999.