

March 11, 1998

980298 7600-4520-59240-09

Encol Project (02)

Mr. Geoffrey W. Beatson, P. Eng. Encal Energy Ltd. 1800, 421 - Seventh Ave S.W. CALGARY, AB T2P 4K9

Dear Mr. Beatson:

RE: PRESSURE MAINTENANCE APPROVAL RIGEL CECIL 'G' POOL

This refers to your application dated February 25, 1998 wherein you requested a waterflood pressure maintenance approval in the subject oil pool.

Attached is Approval #98-09-003 for the application, granted under section 100 of the <u>Petroleum</u> and <u>Natural Gas Act</u>.

This approval becomes effective the date water injection commences in the pool.

Yours sincerely,

B. van Oort, P. Eng.

Director

Engineering and Operations Branch

Attachment

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

G. Miltenberger
Data Management
R. Stefik
D. Richardson
P. Attariwala
G. Farr
S. Chicorelli
Resource Revenue
59240
Daily

APPROVAL 98-09-003

THE PROVINCE OF BRITISH COLUMBIA PETROLEUM AND NATURAL GAS ACT MINISTRY OF ENERGY AND MINES (the "Ministry") 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 Rigel Cecil "G" Pool.

The Acting Deputy Minister of Energy and Mines, 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 "G" Pool as described in the application from Encal to the Ministry dated February 25, 1998 is approved, subject to the following terms:

- 1. The project area of the pressure maintenance scheme consists of sec 10, W/2 sec 14, E/2 sec 15, SW/4 sec 15, SE/4 sec 22, W/2 sec 23, NE/4 sec 23 and sec 26 Twp 88 Rge 18 W6M.
- 2. The project daily oil allowable, based on sum of individual allowables, is 104.3 m³.
- 3. Water may be injected into the Rigel Cecil "G" Pool through the wells 6-10 and 11-23-88-18 W6M.
- 4. The scheme is deemed to have commenced upon water being injected into the wells referred to in clause 3.
- 5. The Energy and Minerals Division 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 2-15-88-18 W6M (WA 10022) 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 Part 9, Section 108 of the *British Columbia Drilling and Production 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, by the Director of the Engineering and Operations Branch.

Joan Hesketh

Acting Deputy Minister

Ministry of Energy and Mines

DATED AT the City of Victoria, in the Province of British Columbia, this 6 th day of March, 1998.