

September 8, 2009

7600-4520-59240-09

Patricia Johnstone **Exploitation Technologist** Pengrowth Corporation 2100, 222 - 3rd Avenue SW Calgary, AB T2P 0B4

Dear Ms. Johnstone:

RE: WATERFLOOD PRESSURE MAINTENANCE APPROVAL (AMENDMENT #9) RIGEL CECIL 'I' POOL

Please find attached an amendment to the waterflood pressure maintenance scheme approval for the subject oil pool as requested in your application dated August 19, 2009.

Production performance and reservoir pressure data from wells in the southern portion of this pool indicate the need for additional water injection at this location to support oil recovery. We concur that additional injection is required for improvement in VRR and effective pool drainage. Accordingly, conversion of the well 02/8-7-88-18 W6M (WA 12120) to a water injection well should increase the pool ultimate oil recovery.

Attached is Approval #99-09-001 (Amendment # 9) for the application, granted under section 100 of the Petroleum and Natural Gas Act. Please note that only the former producing well 02/8-7-88-18 W6M can be converted to a water injection well; all other conditions of the approval remain unchanged.

Should you have any questions, please contact Travis Mercure at (250) 419-4448.

Sincerely,

for Richard Slocomb, P.Eng. Supervisor, Reservoir Engineering

Kelly Ohuspho

Resource Conservation

Attachment

APPROVAL 99-09-001 (AMENDMENT #9)

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

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

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

The pressure maintenance scheme for waterflood recovery of oil from the Rigel Cecil "I" pool as such scheme is described in the application dated January 22, 1999 and modified on October 16, 2008 (Amendment #8) is hereby amended, subject to the terms herein contained:

1. The area of the pressure maintenance scheme shall consist of;

Twp 88 Rge 18 W6M - NE/4 sec 6, E/2 sec 7, W/2 & NE/4 sec 8, W/2 sec 16, E/2 & SW/4 sec 17, sec 21, sec 27, E/2 & SW/4 sec 28, E/2 frac sec 33, frac sec 34

94-A-10 Block K - frac unit 12, frac unit 13, unit 22 and unit 23.

- 2. The project daily oil allowable is 450.0 m³.
- 3. Water may be injected into the Rigel Cecil "I" pool through the wells 15-6, 2-7, 12-16 (BH 5-16), 7-17, 13-27, A2-28, 1-33, and 02/8-7-88-18 W6M.
- 4. The injection pressure measured at the sandface must not exceed the formation fracture pressure.
- 5. All associated gas production will be conserved.
- 6. 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.
- 7. Progress reports shall be filed as stipulated in Section 8 of the *Petroleum and Natural Gas General Regulation*.
- 8. The operations of the pressure maintenance scheme will be subject to periodic review and modification to the approval may be ordered, if deemed appropriate.

for Richard Slocomb

Supervisor, Reservoir Engineering

Resource Conservation

DATED AT the City of Victoria, in the Province of British Columbia, this 8th day of September 2009.