

April 27, 2009

8000-4580-59240-09

Dominic Brunel, P.Eng. Consulting Engineer Pengrowth Corporation 2100, 222 – 3rd Avenue S.W. Calgary, Alberta, T2P 0B4

Dear Mr. Brunel:

RE: WATERFLOOD PRESSURE MAINTENANCE APPROVAL <u>STODDART – NORTH PINE "G"</u>

Commission staff have reviewed the application, dated March 13, 2009, for waterflood pressure maintenance scheme approval for the subject oil pool.

Pool production commenced in December 2000, current cumulative oil is 48 10³ m³ from an estimated OOIP of 192 10³ m³. Good Engineering Practice was approved February 2003, followed by a Concurrent Production approval in November 2003. The current reservoir pressure is approximately 4,500 kPa, from an initial value of 11,400 kPa. The producing oil rate and GOR are fairly stable.

Waterflood pressure maintenance should increase the pool ultimate oil recovery. Notice of this application was posted to the OGC web site, with no objections received. Attached is Approval #09-09-001 for the application, granted under section 100 of the <u>Petroleum and Natural Gas Act</u>. Injection activation will require written notification and submission of the form Monthly Injection/Disposal Statement (BC-S18).

Concurrent Production approval #03-07-010 for the subject pool is rescinded, effective the date that water injection commences.

Should you have any questions, please contact Ron Stefik at (250) 952-0310.

Sincerely,

Richard Slocomb, P.Eng. Supervisor, Reservoir Engineering Resource Conservation

Attachment

Resource Conservation 6th Floor | 1810 Blanshard Street Victoria BC V8T 4J1

T 250.952.0302 F 250.952.0301

APPROVAL 09-09-001

THE PROVINCE OF BRITISH COLUMBIA <u>PETROLEUM AND NATURAL GAS ACT</u> 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 Stoddart field North Pine "G" pool.

A pressure maintenance scheme of Pengrowth for waterflood recovery of oil from the Stoddart – North Pine "G" pool is hereby granted approval pursuant to Section 100 of the Petroleum and Natural Gas Act, subject to the terms herein contained:

1. The area of the pressure maintenance scheme consists of:

Twp 86 Rge 19 W6M – Sections 16, 21 & SW/4 Section 22.

- 2. The oil production allowable for a month shall be based on the previous month's voidage replacement.
- 3. An oil well may be drilled anywhere within the scheme area provided that it is not nearer than 100 m to the sides of the area.
- 4. Water may be injected into the well A11-16-86-19 W6M (WA# 13428).
- 5. The injection pressure measured at the sandface must not exceed the formation fracture pressure.
- 6. All associated gas must be conserved.
- 7. The effective date shall be the date that injection into the well in (4) commences, with written notification to this office.
- 8. Progress Reports shall be filed as stipulated in Section 8 of the *Petroleum and Natural Gas General Regulation*.
- 9. The operations of the pressure maintenance scheme shall be subject to periodic review and modification to the approval may be ordered, if deemed appropriate.

Richard Slocomb Supervisor, Reservoir Engineering Resource Conservation

DATED AT the City of Victoria, in the Province of British Columbia, this 27th day of April, 2009.