



OIL AND GAS COMMISSION

May 25, 1999

2000-4800-59240-07
OGC 990343

Mr. B. K Rauch, P. Eng.
Imperial Oil Resources
237-4th Avenue SW
Calgary, AB T2P 3M9

Imperial Project (06)

Dear Mr. Rauch:

**RE: CONCURRENT PRODUCTION WITH GOOD ENGINEERING PRACTICE;
SECTION 25-85-14 W6MBOUNDARY LAKE - HALFWAY 'F' POOL**

Attached is a Concurrent Production with Good Engineering Practice (GEP) scheme approval for the subject pool, as requested in your application dated April 22, 1999.

The Approval #99-07-004 is hereby granted under Section 97 of the Petroleum and Natural Gas Act. This approval is intended to allow operational flexibility in order to maximize oil recovery.

In a letter dated May 18, 1999 Petro-Canada has presented evidence to show that the Halfway "F" pool encountered in the well ^{W6A 10627} 14-24-85-14 was also at original pressure and that they have plans to complete the well for production from the Halfway "F" pool. Additionally, Petro-Canada has plans to drill a well in the NE/4 sec 23-85-14 for production from the Halfway "F" pool. It is Petro-Canada's argument that if they can demonstrate that low GOR oil production can be obtained from wells in the Halfway "F" pool, then reservoir energy should not be wasted by allowing excessive gas production. We concur with this argument as it meets with the conservation objectives of the Commission. In view of this, we have imposed a gas production limit instead of your request for unlimited gas production.

Please note that the project allowables may be amended if Petro-Canada successfully completes additional wells in the subject pool in the near future.

Yours sincerely,

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

Attachment

c: Willem Rehm, P. Eng., Petro-Canada Resources

Approval Letters to Industry
GEP, SWD, CONCURRENT PROD,
PRESSURE MAINTENANCE,
WATERFLOOD, ETC.

Copy

- Wellfile (originals)
- 59240
- Daily
- Resource Revenue
- R. Stefik
- G. Farr

Email

- D. Krezanowski
- S. Chicorelli
- C. Gibson

ENGINEERING AND GEOLOGY BRANCH

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APPROVAL 99-07-004

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

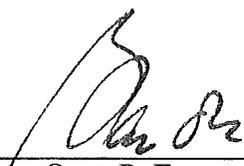
IN THE MATTER of a Concurrent Production scheme with Good Engineering Practice (GEP) of Imperial Oil Resources (Imperial) for producing the Boundary Lake Halfway 'F' pool with a project oil and gas allowable.

NOW, THEREFORE, the Commission, pursuant to Section 97 of the Petroleum and Natural Gas Act (the Act), hereby approves a Concurrent Production project of Imperial for oil and gas production with project allowables, as such project is described in

an Application from Imperial to the Commission dated April 22, 1999, and related submission.

This scheme is approved, subject to the conditions herein contained and, in particular:

1. The area of the scheme shall consist of S/2 sec 25-85-14 W6M.
2. The reserves based project daily oil allowable is 19.9 m³.
3. Gas production from the scheme is limited to 28.0 10³ m³/d. (GGR = 1404)
4. All associated gas produced must be conserved.
5. An oil well may be drilled anywhere within the project area provided that it is not completed nearer than 100 m to the sides of the approved area.
6. This approval may be modified or rescinded at a later date if deemed appropriate.



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

DATED AT the City of Victoria, in the Province of British Columbia, this 2nd day of May, 1999.

May 25, 1999

To: File 2000-4800-59240-06/07

From: Peter Attariwala

**RE: GEP APPROVAL (CONCURRENT PRODUCTION)
BOUNDARY LAKE – HALFWAY ‘F’ OIL POOL**

Imperial oil has recently completed the well Esso NFA Boundary Lake 6-25-85-14 (WA 687) for production from the Halfway “F” oil pool. The well produces with very high GOR (+4500 m³/m³) and requires a GOR penalty relief for economic oil production. Imperial requests a GEP for sec 30-85-13 and sec 25-85-14 with a project DOA of 14.1 m³/d and no gas production limit.

The Boundary lake Halfway was discovered in 1957 with a total of 23 wells drilled in the Halfway of which only 6 are currently producing. The Halfway is very complex and has been segregated into pools “A”, “D”, “E”, “F”, “G” and “H” based on shale breaks between the sand lenses.

Currently there are two approved GEP areas offsetting the Imperial well, one operated by Petro-Canada for sec 24-85-14 and another one for Kaiser in sec 26-85-14 well. Petro-Canada’s GEP for sec 24, approved in 1984 and revised in 1989, has a current project DOA of 24.5 m³/d with gas limit of 34.4 e³m³/d (based on a GOR of 1404 m³/m³). Kaiser’s GEP for sec 26, approved in 1997, has been granted a project DOA of 15.8 m³/d with a gas limit of 22.2 e³m³/d (also based on a GOR of 1404 m³/m³).

In response to a gazette notice of Imperial’s application, Petro-Canada has submitted a letter dated May 18, 1999. Petro-Canada proposes to complete one of their existing wells and drill a new well into the Halfway “F” pool. Additionally, Petro-Canada proposes that we should not approve the GEP with unrestricted gas production. Petro-Canada argues that until they can demonstrate that low GOR oil production is not possible from the Halfway “F” pool, gas production should be restricted.

Pressure data submitted with the Imperial application, supported by data submitted with the Petro-Canada letter of May 18, 1999, shows that the Halfway “F” pool is at initial reservoir pressure. This clearly indicates that oil wells in the previously granted Petro-Canada and Kaiser projects have not been completed in this, the Halfway “F” pool.

Recommendations:

Approve a Concurrent Production with a GEP for area under S/2 sec 25-85-18 W6M only.

Approve a DOA of 19.9 m³/d, based on planimetered reserves under the approved area.

Approve gas production limit of 28 e³m³/d, based on a GOR of 1404 m³/m³ (similar to the ones approved for Petro-Canada and Kaiser projects).