



April 6, 2001

2960-4510/4520-59240-09

OGC - 01087

Jane Mactaggart  
Exploitation Engineer  
Canadian Natural Resources Limited  
2000, 425 - 1<sup>st</sup> Street S.W.  
Calgary, AB T2P 3L8

*CNRL Projects (03)*

Dear Ms. Mactaggart:

**RE: WATERFLOOD PRESSURE MAINTENANCE APPROVALS  
CECIL SIPHON "A" AND CECIL CECIL "A" POOLS**

Attached are waterflood pressure maintenance scheme approvals for the subject pools, as requested in your application dated February 18, 2001.

The Approvals 01-09-002 and 01-09-003 for the applications are granted under Section 100 of the Petroleum and Natural Gas Act. Water injection in the well CNRL Forte Cecil 7-5-85-17 W6M (WA 8053) should improve sweep and enhance oil recovery from these pools. No objections were received following the publication of a notice of the applications in the B.C. Gazette.

Please note that the GEP scheme Approval 99-06-016 for the Siphon "A" pool and the Concurrent Production scheme Approval 99-07-009(Amendment #1) for the Cecil "A" pool will be rescinded upon the effective date of the subject waterflood approvals.

Incremental production from new pressure maintenance schemes qualifies for the third tier royalty status (Ref: Information Letter F2000-1, Resource Revenue Branch). Incremental production from these pools may qualify for third tier royalty status. For details you are advised to contact the Royalty Administrator, Resource Revenue Branch of the Ministry of Energy and Mines.

Sincerely,

Craig Gibson, P. Eng.  
Manager  
Reservoir Engineering and Geology

Attachments

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

Copy 9

- Wellfile (originals)
- 59240
- Daily
- Resource Revenue
- S. Chicorelli
- R. Stefik
- G. Farr
- P. Attariwala
- D. Krezanoski

**ENGINEERING**  
PO Box 9329 Stn Prov Gov't, Victoria BC  
Location: 6<sup>th</sup> Flr 1

Headquarters: #200, 10003 110<sup>th</sup> Ave, Fort St. J

WM

0291

-5744

APPROVAL 01-09-002

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

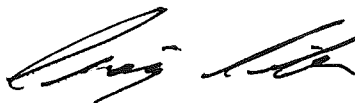
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IN THE MATTER of a pressure maintenance scheme of Canadian Natural Resources Limited (CNRL) for recovery of oil by water injection in the Cecil Siphon "A" Pool.

NOW THEREFORE, the Commission, pursuant to Section 100 of the Petroleum and Natural Gas Act, R.S.B.C. 1996, c.361 orders as follows:

The pressure maintenance scheme of CNRL for recovery of oil by waterflooding in the Cecil Siphon "A" Pool as described in the application from CNRL to the Commission dated February 18, 2001 is approved, subject to the following terms:

1. The project area of the pressure maintenance scheme consists of sec 32-84-17 W6M, sec 5 and sec 8-85-17 W6M.
2. The project daily oil allowable, being the sum of individual well allowables, is 80.0 m<sup>3</sup>.
3. Water may be injected into the Cecil - Cecil "A" pool through the well 7-5-85-17 W6M. 8053
4. The scheme is deemed to have commenced upon water being injected into the well 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. An oil well may be completed anywhere within the project area provided that it is not nearer than 100 m to the sides of the project area.
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 will be subject to periodic review and modification to the approval may be ordered, if deemed appropriate.



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Craig Gibson  
Manager  
Reservoir Engineering and Geology

DATED AT the City of Victoria, in the Province of British Columbia, this 14 day of April, 2001.

APPROVAL 01-09-003

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

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IN THE MATTER of a pressure maintenance scheme of Canadian Natural Resources Limited (CNRL) for recovery of oil by water injection in the Cecil Cecil "A" Pool.

NOW THEREFORE, the Commission, pursuant to Section 100 of the Petroleum and Natural Gas Act, R.S.B.C. 1996, c.361 orders as follows:

The pressure maintenance scheme of CNRL for recovery of oil by waterflooding in the Cecil Cecil "A" Pool as described in the application from CNRL to the Commission dated February 18, 2001 is approved, subject to the following terms:

1. The project area of the pressure maintenance scheme consists of SW/4 sec 32, N/2 sec 32-84-17 W6M and sec 5-85-17 W6M.
2. The project daily oil allowable, being the sum of individual allowables, is 40.8 m<sup>3</sup>.
3. Water may be injected into the Cecil Cecil "A" pool through the well 7-5-85-17 W6M. 8053
4. The scheme is deemed to have commenced upon water being injected into the well 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. An oil well may be completed anywhere within the project area provided that it is not nearer than 100 m to the sides of the project area.
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 will be subject to periodic review and modification to the approval may be ordered, if deemed appropriate.



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Craig Gibson  
Manager  
Reservoir Engineering and Geology

DATED AT the City of Victoria, in the Province of British Columbia, this 17<sup>th</sup> day of April, 2001.