

December 20, 2006 8130-4520-59240-09

R. A. Pachovsky, P. Eng. Senior Staff Engineer Duvernay Oil Corp. 1500, 202 – 6<sup>th</sup> Avenue S.W. Calgary AB T2P 2R9

Dear Mr. Pachovsky:

## RE: GAS CYCLING AND GAS INJECTION PRESSURE MAINTENANCE SCHEME APPROVAL; SUNSET PRAIRIE CECIL "D" POOL

The Commission has reviewed your application dated November 10, 2006 requesting reinstitution of the gas cycling scheme approval with natural gas liquid recovery from the gas cap of the subject pool.

The Commission rescinded gas cycling scheme approval 99-13-001 on May 16, 2006 after Duvernay had voluntarily suspended gas cycling operations in December 2005. Partner concerns regarding equity and ultimate recovery of reserves were cited as reasons for termination of the gas cycling scheme. Effective July 1, 2006 Duvernay Oil Corp. has acquired all of Imperial Oil Resources' working and royalty interests in the subject pool. As such there are no longer any equity issues for this pool. However, there remains a concern with regard to effective management of the resource; specifically maximization of recovery of remaining oil reserves.

Duvernay Oil Corp. has further plans to supplement dry gas re-injection with Doig gas produced from the Groundbirch area thus enabling 100% pool voidage replacement on a monthly basis. The Commission is satisfied that additional dry gas injection to maintain reservoir pressure will assist in maximizing recovery of oil and hydrocarbon liquids from the pool.

The injection of the Doig gas into the subject pool is considered royalty exempt due to the locations of production and injection being held by the same owner. However there is a royalty concern that relates to the royalty rate structure of the non-conservation Doig gas being injected and the conservation gas classification of the native Cecil gas. Consequently, a reporting mechanism must be established with the Mineral, Oil and Gas Revenue Branch to track the Doig gas injected and produced from the subject pool prior to any Doig gas being injected into the subject pool. Gordon Lee, Manager of the Validations/Audit Section can be contacted at (250) 952-0214 to set up the reporting procedures.

2...

The Approval 06-13-001 is hereby granted under Section 100 of the <u>Petroleum and Natural Gas Act</u> subject to setting up a reporting procedure with the Mineral, Oil and Gas Revenue Branch. Approval 96-09-005, issued for waterflood pressure maintenance approval of the subject pool and last amended November 12, 1998, remains in effect.

Sincerely,

Doug McKenzie

Director

Resource Conservation Branch

Attachment

## APPROVAL 06-13-001

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

IN THE MATTER of a gas cycling scheme and pressure maintenance scheme by Duvernay Oil Corp. (Duvernay), for recovery of oil, hydrocarbon liquids and re-injection of the produced gas into the Sunset Prairie Cecil "D" gas cap.

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

- 1. The gas cycling scheme and pressure maintenance scheme of Duvernay for recovery of oil, hydrocarbon liquids and re-injection of the processed gas into the Sunset Prairie Cecil "D" gas cap as such scheme is described in an application to the Commission dated November 10, 2006 is hereby approved, subject to the terms herein contained:
- 2. The scheme area shall be delineated by sections 3, 4 and 10-81-18 W6M.
- 3. Raw gas production will be limited to a maximum of  $141.0 \cdot 10^3 \text{m}^3/\text{d}$ .
- 4. All processed gas, stripped of natural gas liquids, will be re-injected into the Sunset Prairie Cecil "D" pool through well 4-10-81-18 W6M.
- 5. Doig formation gas from any well completed within the Groundbirch field may be injected into the Sunset Prairie Cecil "D" pool through well 4-10-81-18 W6M.
- 6. Pool voidage replacement, on an annualized basis, for the Sunset Prairie Cecil "D" pool shall be 1.0.
- 7. Progress reports shall be filed as stipulated in Section 8 of the *Petroleum and Natural Gas General Regulation*.
- 8. The operations of the gas cycling scheme will be subject to periodic review, and modification to the approval may be ordered, if deemed appropriate.

Doug McKenzie

Director

Resource Conservation Branch

Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this 20<sup>th</sup> day of December, 2006.