

September 12, 2019

1260-4100-32640-60

Lynn Wood, P.Eng.  
Exploitation Engineer  
Canadian Natural Resources Limited  
Suite 2100, 885 – 2nd Street SW  
Calgary, Alberta, T2P 4J8

Dear Ms. Wood,

**RE: OBSERVATION WELL STATUS APPROVAL  
CNRL BIRCH d-32-J/94-A-13 (WA# 4926)  
BIRCH – BALDONNEL C**

BC Oil and Gas Commission (Commission) staff have reviewed the July 23, 2019 application from Canadian Natural Resources Limited (CNRL) seeking observation well designation for CNRL Birch d-32-J/94-A-13 (WA 4926).

The Drilling and Production Regulation Part 1 defines an observation well as “a well or a portion of a well designated as an observation well under section 2 (7)”.

- 2 (7) An official may designate a well as an observation well if
- (a) the well is being used to monitor reservoir pressures or to obtain other formation information, and
  - (b) the well is not used to produce from, or inject or dispose of fluids into, a formation being monitored.

The subject well was drilled in 1979 and the Baldonnel formation was completed for the purpose of oil production. The last reported production from the well is dated May 2018. A waterflood pressure maintenance project has been active in the Birch field, Baldonnel ‘C’ pool since May 2010. Reservoir performance indicates that the pool is highly compartmentalized and there is significant pressure variation between wells.

CNRL is requesting use of this well to monitor reservoir pressure in the Birch Baldonnel ‘C’ pool to understand the pressure dissipation in the pool as it equalizes. CNRL is proposing annual reservoir pressure testing be completed in the pool.

Approval of observation status is granted for CNRL Birch d-32-J/94-A-13 (WA 4926), for the Baldonnel ‘C’ pool, with the following requirement;

- conduct a reservoir pressure test annually using downhole recorders.

Please be reminded that all reservoir pressure tests conducted must be submitted to the Commission within sixty days of the date on which the pressure was measured.

Should you have any questions, please contact Kathryn Archibald at (250) 419-4406 or the undersigned at (250) 419-4430.

Sincerely,



\_\_\_\_\_  
Ron Stefik, Eng. L.  
Supervisor, Reservoir Engineering  
Oil and Gas Commission