

July 31, 2017

9030-2800-32640-60

Lynn Wood, P.Eng
Exploitation Engineer – BC South
Canadian Natural Resources Ltd.
Suite 2500, 885 – 2nd Street SW
Calgary, Alberta, T2P 4J8

Dear Ms. Wood,

**RE: OBSERVATION WELL DESIGNATION WITHDRAWAL
CNRL NOEL b-19-F/93-P-8 (WA 15361)
DEEP BASIN – CADOMIN ‘A’**

The BC Oil and Gas Commission (Commission) is presently reviewing observation wells, to confirm the suitability of this status and amend or rescind approvals, to conform to current requirements. Staff have reviewed the observation well in the Deep Basin field, Cadomin ‘A’ pool; CNRL Noel b-19-F/93-P-8 (WA 15361).

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 2003 and the Nikanassin and Cadomin formations were completed for the purpose of gas production. The Nikanassin produced from June to December 2003, when it was suspended by the installation of a bridge plug. The Cadomin formation produced from 2003 to 2008. The status of the Cadomin completion event was updated to observation in November 2008. In early 2009 a microseismic array was run into the well to monitor hydraulic fracturing operations in offset wells. The array was pulled in June 2009. The most recent pressure test on file for the well is dated July 2009.

The requirement to use the subject well to monitor reservoir pressures or to obtain other formation information is no longer being met. The observation well designation for CNRL Noel b-19-F/93-P-8 (WA 15361), will be withdrawn as of August 30th, 2017, and the status will revert to suspended gas observation unless a valid reason for designation is provided to this office prior to that date.

Should you have any questions, please contact Kathryn Archibald at (250) 419-4457 or the undersigned at (250) 419-4430.

Sincerely,



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