3445-6200/5000-59070-20



June 28, 2018

Brittany Jorgensen, P.Eng. Exploitation Engineer Canadian Natural Resources Limited 2500, 855 – 2nd Street SW Calgary, AB T2P 4J8

Dear Mrs. Jorgensen:

RE: COMMINGLED PRODUCTION SPECIAL PROJECT APPROVAL CNRL et al W Eagle 16-03-085-19; WA #8863

The Oil and Gas Commission (Commission) has reviewed your application dated June 7, 2018 requesting approval to commingle an additional perforation interval in the Montney formation with oil production from the Belloy 'A' & Montney 'B' pools in the subject well.

The subject well was drilled in September 1994 to a total depth of 1952.0 mKB. The Belloy formation was initially perforated and fracture treated, the well then recompleted in the Montney formation. In March 1995 commingled production approval was granted with allocation factors for the Belloy and the Montney zones of 80%/20%, respectively.

Well 16-03 last produced in March 2009, at a commingled oil rate of 1.29 m³/d with a GOR of 279 m³/m³ and 0.35 m³/d water. The addition of identified oil pay, higher in the Montney, may provide an economic operating rate. However, the Belloy formation in the 16-03 well may be in communication with the West Eagle Belloy 'A' Unit #1 waterflood, with over-pressure leading to cross-flow. The Commission therefore requires a reservoir pressure of the existing Belloy/Montney zones, prior to addition of the new interval.

Please find Order 95-20-010 Amendment #1 attached, designating an area in the Eagle West field within the Belloy and Montney formations as a Special Project under section 75 of the *Oil and Gas Activities Act* for Commingled Production. The Commission maps the proposed new perforation interval of 1823.6 to 1835.8 mKB within the existing Montney 'B' pool. Therefore, a new UWI is not required, the perforation interval for CE 02 will be extended to include the new perforations. Please submit a form BC-11, noting added perforation interval and commingled production Approval.

Initial allocation factors are listed in the attached Order. However, due to the absence of a production test on the new Montney interval, the Commission requests that CNRL provide a revised allocation factor for all products after three months of production, with values derived by difference from last recorded production.

A commingle Notification form, which can be found on the OGC website (<u>http://www.bcogc.ca/industry-</u><u>zone/documentation/Commingling</u>), must be submitted as indicated on the form as well.

Should you have any questions, please contact Ron Stefik at (250) 419-4430 or Petra Kriescher-Trudgeon at (250) 419-4415.

Sincerely,

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

Attachment

BC Oil and Gas Commission 300 – 398 Harbour Road Victoria BC V9A 0B7 **T 250.419-4400** F 250.419-4403 www.bcogc.ca

IN THE MATTER of an application from Canadian Natural Resources Limited to the Oil and Gas Commission dated June 7, 2018 for Commingled Production approval.

ORDER 95-20-010 Amendment #1

1 Under Section 75(1)(a) of the Oil and Gas Activities Act, the Commission designates the commingling of production from the Eagle West field – Belloy 'A' & Montney 'B' pools as a special project for the optimum recovery of oil by commingling production within the following area;

DLS Twp 85 Rge 19 NW/4 of section 3

- 2 Under section 75(2) of the *Oil and Gas Activities Act*, the special project designation in this Order is subject to the following conditions:
 - a) Production from the Belloy 'A' (1891.0 1922.5 mKB) and Montney 'B' (1823.6 1872.0 mKB) may be commingled through well CNRL et al W Eagle 16-3-85-19 (WA # 8863).
 - b) The requirement for a daily oil allowable (DOA) is waived.
 - c) A reservoir pressure measurement of the existing commingled Belloy & Montney intervals is required prior to addition of the perforation interval 1823.6 – 1835.8 mKB.
 - d) Gas, oil and water production from the commingled well must be initially allocated on the Ministry of Finance BC-S1, BC-S2 and BC-08 forms on the basis of Belloy 'A' 20% and Montney 'B' 80%. Following three months of production, the allocation factors and production may be amended to reflect variance from last values prior to added perforations.

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

DATED AT the City of Victoria, in the Province of British Columbia, this $2\mathfrak{P}^{\mathcal{T}}$ day of June, 2018.