

June 4, 2021 2820-4800-59240-07

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

Dear Ms. Jorgensen:

RE: CONCURRENT PRODUCTION SPECIAL PROJECT APPROVAL BULRUSH FIELD – HALFWAY 'A' POOL UNIT #1

The Commission has reviewed the application from Canadian Natural Resources Limited (CNRL), dated April 30th, 2021, requesting a Concurrent Production project approval for the subject pool.

The discovery well, CNRL et al Bulrush d-78-F/94-A-16 (WA 1267), was drilled in February of 1963. Four more wells were drilled in the 1960s and one final well CNRL Bulrush c-79-F/94-A-16 (WA 11399) was drilled in 1998. The pool contains seven wells, two active oil producers, one active gas injector, two suspended wells, and two abandoned wells. Approval for gas re-injection was granted 1966 by Order 66-09-001. The approval was amended in 1989 to allow for water injection and again in 1998 to accommodate a newly drilled well in the pool, WA 11399.

The Commission concurs that the pool is near the end of its economic life and removal of the DOA restriction will increase the economically recoverable hydrocarbon reserves in the pool. Attached is Order 21-07-001 designating Concurrent Production for the Bulrush field - Halfway "A" pool Unit #1 as a Special Project under section 75 of the Oil and Gas Activities Act. The project DOA is waived. Produced gas will continue to be conserved.

This approval becomes effective and the pressure maintenance gas injection approval for the subject Unit, Order 66-09-001, is suspended when injection into the pool ceases. Conversely, if injection recommences due to a change in operations or economics, the approvals are asynchronous and this approval becomes suspended, and approval Order 66-09-001 becomes active. The permit holder must notify the Commission when injection ceases or restarts within 15 days of cessation or restart. Approval Order 66-09-001 will be amended to reflect these changes in the near future.

Please note that production from the gas cap through the gas cap well, CNRL et al Bulrush d-9-K/94-A-16 (WA 1597), remains prohibited under section 65(5) of the *Drilling and Production Regulation*, for preferential pool oil production. Production from the well would require a justification application for an exclusion under section 4(1)(w).

Should you have any questions, please contact Logan Gray at (250) 419-4465 or the undersigned at (250) 419-4430.

Sincerely,

Ron Stefik, Eng.L.

Supervisor, Reservoir Engineering

Oil and Gas Commission

Attachment



IN THE MATTER of the application from Canadian Natural Resources Limited to the Oil and Gas Commission dated April 30th, 2021 requesting Concurrent Production approval:

ORDER 21-07-001

1. Under Section 75(1)(d) of the Oil and Gas Activities Act, the Bulrush field – Halfway 'A' pool is designated as a special project for recovery of petroleum and natural gas utilizing Concurrent Production within the following area:

NTS 94-A-16 Block F – Units 78, 79, 88, 89, 98, and 99

Block K - Units 8 and 9

- 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) Well spacing and target area restrictions are waived.
 - b) The project daily oil allowable is waived.
 - c) All produced gas must be conserved.
 - d) This order is effective when injection into the pool ceases.
 - e) Notify the Commission at Reservoir@bcogc.ca within 15 days when injection into the pool ceases or restarts.

Ron Stefik, P.L.Eng.

Supervisor, Reservoir Engineering

Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this 4th day of June 2021.